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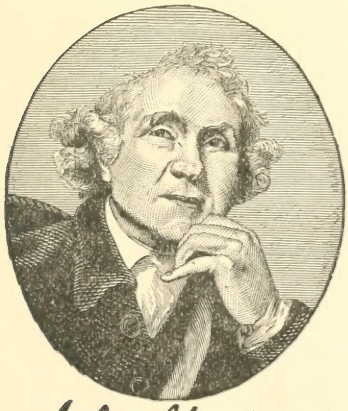

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ORIGINAL ARTICLES.

HEART AND PULSE IN ACUTE NEPHRITIS.[1]

BY G. BAUMGARTEN, M. D., *Prof. of Physiology, St. Louis Medical College.*

THE topic of this paper, which one recent case in my practice induced me to select, is relatively new. For many years I have noted the tense, hard pulse in *acute* nephritis; to me this symptom always had considerable diagnostic value. The occurrence of hypertrophy of the heart in this disease has become known to me only through a few cases of which I shall speak presently. Hard pulse and secondary hypertrophy of the heart have always been insisted upon as symptoms of chronic renal affections, especially of contracted kidney; but the same symptoms in acute Bright's disease have been spoken of only in the last few years.

A quotation from Riegel's article on this subject in the *Berliner klin. Wochenschrift*, (1882, Nos. 23, 24.) will best set forth this point:

"In the recently much discussed question of the connection

1. Being the substance of a paper read before the *Verein Deutscher Aerzte* Nov. 14, 1884, with report of two additional cases.

between renal and cardiac disease, only the chronic forms of nephritis have hitherto been considered. Disorders of the apparatus of circulation in acute nephritis have scarcely anywhere been mentioned. Friedlaender alone has recently informed us (*Verhandl. d. Berl. Physiol. Gesellsch.*, November 12, 1880; *Arch. f. Physiol.*, 1881, p. 168,) that in the anatomical examination of a large number of cases of scarlatinal nephritis he has for a long time found regularly, in children almost invariably, a considerable hypertrophy with dilatation of the heart, in some cases equally developed on both sides, in most cases more considerable on the left than on the right side." * * *

"In contrast to these anatomical results, clinical observation has not been able to demonstrate any changes in the organs of circulation in acute nephritis; at least they are not mentioned in any of the writings on this subject. Traube only remarks in very general terms that an abnormally high tension of the aortic system may come under observation as early as the fourth week of a nephritis. It may perhaps seem more important that Traube in another place says that in severe cases of diffuse nephritis in youthful persons a number of palpatory and auscultatory phenomena can be observed, as a rule, in the first weeks of the disease, which put beyond doubt a notable sympathy of these organs. * * * Nor do we find mention of this connection in any of the later authors."

I have taken some pains to verify this last remark of Riegel's. In a pretty large collection of literature on nephritis, lesions of the organs of circulation in acute Bright's disease are hardly touched upon; at most, the pulse is characterized cursorily as hard and full, but many authors do not even mention the pulse. Only the very latest works refer to it. But even Tyson in his recent excellent Treatise on Bright's Disease and Diabetes, 1881, says (p. 109): "Hypertrophy of the heart is not a frequent complication of acute nephritis," and argues that it could not well occur in true acute nephritis, since time is necessary for its development. "It occasionally happens, however, that the hypertrophy occurs earlier. Thus Dickinson reports a case recognized at eight weeks, in a child of seven years. In children the heart hypertrophies more rapidly than in adults."

Henoch, aware of the post-mortem results of Friedlaender, speaks of them, but without attaching weight to them. (*Vorlesungen ueber Kinderhkd.*, 1881.)

The latest work on renal diseases by Fuerbringer, 1884, on the other hand, brings up the matter thus (p. 82):

"In spite of the positive observations of Traube, Wagner and v. Bamberger, the part which the organs of circulation play in this disease [acute nephritis] has hardly ever been spoken of. We know at present, especially through Friedlaender, that in the course of scarlatinal nephritis in children almost constantly, in many cases very early, a dilatation and hypertrophy especially of the left ventricle occurs, amounting to an increase in weight up to 50 per cent. Moreover, simple acute dilatation in consequence of functional disturbance of the heart's muscle are not wanting (Goodhard, Silbermann, Steffen.) In pronounced cases the enlargement of the heart is probably always demonstrable during life by physical exploration; lesser degrees escape diagnosis."

As I have stated before, the hard tense pulse has been known to me for a long time, and I do not remember ever to have missed it in acute nephritis; but supposing it to be a well known and recognized symptom of the disease, I did not pay especial attention to it until lately, when it gained interest as a sphygmographic object. Hence I have preserved accurate data in only three cases, the details of which, either because I took sphygmographic tracings or for other reasons, found their way into my case-book.

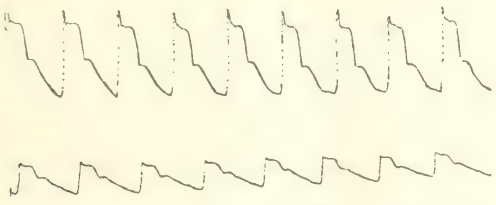

FIG. 1.—Mrs. T., æt. 54, April, 1879, (Marey's Sphygmograph.)

CASE 1.—I place before you tracings of the pulse of Mrs. T., aged 54, who was taken sick in April, 1879, with an acute

nephritis of unknown origin. The large, hard, and slow (long) pulse led me to make the diagnosis, which was confirmed by the urine loaded with albumen, red blood corpuscles, white corpuscles, hyaline and white-cell casts.

Fig. 1 shows, in the upper tracing, the pulse of the first day on which she presented herself; the lower tracing was taken three days later, after some active purgation. At this time she had no dropsical symptoms; these appeared later, however, when the patient had passed into the hands of a colleague for whom I continued to examine the urine. The patient recovered with a hypertrophy of the left ventricle, the existence of which I had the opportunity of verifying a year later.

CASE 2.—H. P., a boy of eight years, was seized with a pretty severe scarlatina on December 4, 1883, but recovered so far that after December 11 I visited him only occasionally. Towards the end of December the urine had repeatedly been found free from albumen. On December 25, loss of appetite, slight fever, pallor of face and some edema of the lids set in; in striking contrast with these symptoms and the originally feeble constitution of the boy was the pretty large, very tense, not accelerated pulse. Notwithstanding the urine was of about normal quantity and contained no albumen, I made the diagnosis of acute nephritis, which on December 31 was, unfortunately, confirmed by the occurrence of violent uremic convulsions. On the next day, the convulsions having ceased or been replaced by a light coma, the urine became scanty and albumen appeared, increasing in quantity; in the next days the urine became bloody. The incompressible pulse continued; the cardiac region bulged a little; dullness on percussion was found moderately extended to the left; the apex beat very distinct, lifting the palpating finger, broadened, and displaced downwards and outwards. Later, general anasarca and some ascites set in, increasing slowly. During the tedious convalescence, the child occasionally complained of palpitation; towards the end of it, the local signs in the region of the heart appeared to me less than before, but the apex beat was still considerably displaced to the left. The boy has since been well and not under my observation.

CASE 3.—W. W., a boy of nine years, passed through a mild attack of scarlatina September 1—7, 1884. September 14, he appeared quite well, without fever, and had a good appetite; desquamation had not begun. September 17, the urine contained no albumen; September 19, not having left his room, he had a dry "nervous" cough. On the afternoon of the 20th he complained of lassitude and headache; later in the evening violent vomiting set in. The skin of the cheeks and about the jaws was edematous. A brisk purgative removed the former symptoms, the patient felt well on the next day, but the edema had invaded the lower eyelids. The urine was scanty, but clear, specific gravity 1018, with a trace of albumen, but free from casts. The pulse was hard, the heart's impulse was felt over a large area.

September 22, the urine was found diminished, the albumen increased, and there was slight edema of the hands.

September 23, more albumen, but still not amounting to one per cent.; scanty sediment which contained, besides many white corpuscles, a few hyaline casts enclosing white corpuscles or dusted over with fine granules. Pulse hard; apex beat very violent, lifting the finger, in the sixth intercostal space, one-fourth of an inch to the left of mammillary line. Cardiac sounds loud and metallic.

September 24, urine increased in amount, but still albuminous; casts in much greater number, some darkly granular; no edema. The subjoined pulse tracing (Fig. 2) was taken on this day.

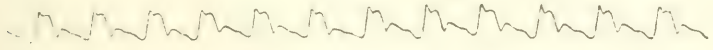

FIG. 2—W. W., æt. 9, Sept. 24, 1884. (Pond's Sphyg.)

On October 1, the urine was copious and contained only a small amount of albumen and few casts. Peeling of skin of hands and feet was active. The symptoms on the part of the organs of circulation were almost unchanged; pulse full and large, but less tense (Fig. 4); the apex beat still very low (in sixth intercostal space,) just outside of the mammillary line.

On October 7, albumen had disappeared. Patient felt well, though he was pale and feeble.

On October 9, the sphygmograph recorded the tracing of a normal pulse. The apex beat was still visible in the sixth intercostal space, and rather strong.

An unbiased consideration of the condition of the circulation from September 24 to October 7, by itself, would certainly lead to the diagnosis of excentric hypertrophy of the heart. I see no reason to alter this diagnosis in anything that the origin and course of the case suggests, in spite of the obvious objection that the development of the hypertrophy must have been very acute. After the anatomical observations of Friedlaender and recent clinical experience, this objection is no longer valid.

Before proceeding, I will remark in parenthesis that in both of these cases of scarlatinal nephritis, albuminuria was not the first symptom of renal affection. This is not a rare occurrence, as recent literature shows. (*Cf.*, *e. g.*, Duckworth, *Bartholomew's Hosp. Rep.*, 1883.)

Two points, more especially, are illustrated by these cases, viz.,

1. In acute nephritis the tension in the aortic system is increased; in severe cases the degree of tension is higher than is ever observed in any chronic renal affection. This takes place, as a rule, in the very beginning of the disease; so early that I regard the hard and long pulse (*P. durus et tardus*) as a valuable diagnostic sign in the early stages of acute Bright's disease. This high tension in the systemic arteries does not last through the entire course of the disease, but gradually diminishes, at least in cases which terminate in recovery.

It is necessary to remember, however, that when the disease is ushered in with a high temperature, the blood pressure is lowered correspondingly, and the abnormal tension of the pulse is modified in the opposite sense, neutralized; the sphygmograph traces the curve, not always of the dicrotic fever pulse, but of an approximately normal one.

2. In many cases of acute nephritis, above all in children, acute dilatation and hypertrophy of the left ventricle are developed, at times very early in the disease.

Is it possible, now, that hypertrophy of the heart can develop in so short a time? All our current conceptions of muscular

hypertrophy seem to contradict this idea. We can comprehend an acute dilatation; but Friedlaender's post-mortem observations prove, in addition, a considerable increase of weight. Can we conceive, for example, that time was given, in the case of W. W., for the growth of the muscle which the physical signs indicated at a time when the nephritis was apparently in its incipiency? If we set the beginning of the renal affection at the nineteenth or twentieth day of the disease, when convalescence was first interrupted, it appears indeed impossible that the nephritis should have produced the hypertrophy, or even the dilatation; if these had been developed by the twenty-third day, as the symptoms indicated, the nephritis must have begun earlier than the nineteenth day, of which I have little doubt.

It is not necessary in this place to recount the theories of the connection of chronic renal disease and high arterial tension or to apply them to the acute form. It is a matter of observation that a rise in blood-pressure occurs early in acute nephritis, especially in those forms which begin anatomically as a glomerulonephritis (in scarlet fever, measles, malaria?). In the latter event, the blood current in the renal vessels is far more suddenly impeded, and in a greater degree, than by any other lesion; the blood-pressure in the aortic system rises very rapidly, and the conditions for dilatation of the left ventricle arise very early. Indeed we possess excellent clinical testimony that they may lead to very acute dilatation (Silbermann, *Jahrb. f. Kinderheilk.* XVII, 178), and that this acute dilatation involves serious danger to life unless promptly compensated by hypertrophy of the muscle (see cases of Goodhard, *Guy's Hosp. Reports* XXIV). In the case related of W. W., the high arterial tension was evident; it necessarily led to dilatation; but the latter was not followed by untoward consequences because a compensating hypertrophy developed parallel with it. This, indeed, seems to be the usual course of events. Silbermann (*l. c.*) expresses himself thus: "If the rapidly developed considerable impediments in the aortic system are to be well overcome, a very rapid and considerable hypertrophy must certainly come about, as it happened in Friedlaender's cases and our own, in order to effect a compensation promptly". He goes so far as to ask: Why

is it that in some cases of scarlatinal nephritis dilatation only occurs and not also hypertrophy? and replies that in these cases the cardiac muscle has itself been seriously impaired (whether by anemia, or by the scarlatinal process itself) and hence has become relatively insufficient in power, unable to rise to compensating growth.

If, however, the dilatation has once begun, it will rapidly attain a considerable degree, especially when not compensated.

Let us remember, finally, that in young individuals, who almost exclusively furnish the material for these considerations, the heart's muscle grows with ease, and that in the majority of cases we cannot accurately determine the beginning of the nephritic process. Supposing that the lesions of the renal and perhaps other vessels have existed for a longer time, before dropsy or uremic symptoms, or even albuminuria and scanty urine, have yet announced the nephritis (my second case justifies such a supposition), then more time is given for the growth of the cardiac hypertrophy than we ordinarily assume. Continued sphygmographic investigations during the convalescence from scarlet fever are calculated, and seem requisite, to determine with accuracy the period at which the arterial tension rises.

Since the date of the above paper, two cases have come under my observation, which give further testimony on this subject.

CASE 4.—Dr. A. M. Bierwirth kindly permitted me to examine a case of acute nephritis, the etiology of which was not clear. There was no history of scarlet or other infectious fever. L. L., a boy of 14 years, was taken sick early in March, 1885, with general malaise, vertigo, headache, loss of appetite, and, later, frequent vomiting, which continued throughout; there was little elevation of temperature at any time, the pulse usually ranging from 80 to 100. Urine bloody until a few days before death. Feet and face highly edematous, hands less so. Ascites could not be demonstrated with certainty. When I had the opportunity to examine the patient, April 14, the urine contained a moderate amount of blood, much albumen, and various casts in small number; the pulse was hard, as the accompanying tracing shows.

The condition of the heart is described by Dr. Bierwirth in these words: "In the third week patient began to complain of pain in the cardiac region; the heart was enlarged toward the left, its impulse seen and felt one-half to one inch outside of the mammillary line, and dislocated downwards.[1] Towards the right

FIG. 3.—L. L., æt. 14. April 4, 1885. (Pond's Sphyg.)

and upwards the area of cardiac dulness was not increased. The heart's sounds were pure, but muffled."

The case ended fatally May 10; autopsy was not permitted. In this case the aortic tension was increased in the earlier stages, and the left ventricle was certainly dilated, though perhaps not much thickened.

CASE 5.—H. R., a boy of 4½, had the scarlatinal eruption March 5, 1885. March 21, his feet swelled and were painful; March 26, his right hand became edematous; March 29, severe headache and vomiting set in, and April 2, his face and both hands and feet were swollen. Urine scanty and highly albuminous. Vomiting continued into May.

When I first saw this patient, May 5, there was also considerable ascites, the line of dulness in semi-recumbent posture reaching above the navel. Pulse large, hard, 90; the urine scanty, of a meat-juice color from presence of blood, albumen more than ½ vol., the copious sediment consisting of red and white blood corpuscles, hyaline, darkly granular and fatty casts, fatty epithelia and debris. May 8, I determined accurately by percussion the position of the heart and the extent of the ascites, with the result shown in figure 4.

(In the figure the hepatic dulness has been omitted. The dotted line in the region of the apex bounds the area of the impulse.) The apex beat was seen increased in extent, and was felt most distinctly with a strong, lifting impulse in the sixth intercostal space, and more than an inch outside of the mammillary line. The

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1 Notwithstanding a distended tympanitic abdomen.

heart's sounds were pure and loud. The ascites had diminished under a few days' active diaphoretic treatment (hot water pack.)

At the present date the albumen and casts in the urine have

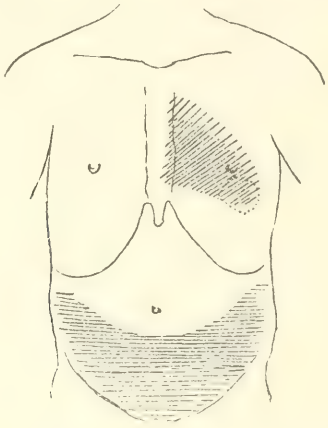

FIG. 4.—H. R., æt. 4. May 9, 1855.

lessened, the blood has disappeared, as also the anasarca, but some ascites remains. Yet the percussion boundaries of the heart are unchanged.

June 17, 1885.

ON CHOLERA.

BY JOHN H. TRADER, SEDALIA, MO.

[*Read before the Missouri State Medical Association, May* 12, 1884.]

ON account of the many articles which I have seen in the journals, in regard to the probable visitation and management of cholera, I am led to add my mite in the way of new or different methods of treating this fatal malady. What I have to say is a matter of experience. Ten or twelve years ago we had what appeared to be a few cases of genuine Asiatic cholera. The first case lived about six hours, the next case got well, the next died, and two other cases in the same family recovered. My partner, at the time, Dr. T. J. Montgomery (now deceased), who had passed through several epidemics of cholera, pro-

nounced these cases genuine Asiatic cholera. I had made up my mind that the best way to treat this malady was by hypodermic medication. I provided my case with a saturated solution of quinine, morphine, atropia, etc. I also had provided a mixture of chloroform ℥j, glycerine ℥v, M., and carbolic acid ℥j and glycerine ℥vj, M.

During the epidemic I was hastily summoned one night to the bedside of a patient in the first stages of cholera. There was great prostration, and the rice water discharges had begun, with excessive cramping of the abdominal muscles and the muscles of both upper and lower extremities. In order to relieve to some extent the violent cramps, I concluded to give a teaspoonful of the chloroform mixture. Soon after swallowing the medicine the patient desired to know what it was that I had given her, "for," said she, "I believe, doctor that you have killed me." The vomiting ceased at once, the cramps soon gave way, the patient began to breathe quite heavily and calling the family around her told them that she was dying. I took a second look at the bottle of medicine and discovered that I had given a teaspoonful of the carbolic acid mixture instead of the chloroform. About the only consolation that I could reasonably expect from this blunder was that the patient would have soon died anyway. To my surprise she soon went into a sound sleep. The skin became warm and the sweating ceased. No other medicine was given, and after five or six hours of sound sleep the patient awoke apparently well. Next day she was up and walking about the house and yard.

I could not account for so unusual an occurrence. Believing, however, that the carbolic acid had something to do in the restoration of the patient, I set about to devise some eligible way in which to give it. I used this formula:

℞ Glycerole of Carbolic Acid
Glycerole of chloroform
Tinct. opii
" matico
Camphor water
Aqua menth. pip.
" " virid. ℥j M.

Of this mixture I gave about 15 to 20 drops every five to ten minutes in hot water until relief was obtained. I must say that I was not, am not now, disappointed in the power of this combination. I rarely ever fail to arrest disturbance of the stomach or vomiting depending upon disordered stomach, especially where the element of fermentation is present. I give you this for what it is worth. I do not rely upon this remedy solely, but certainly think that it becomes an indispensable requisite in the successful treatment of all diseases partaking of the nature of cholera.

TYPHOID OR ENTERIC FEVER.

BY B. F. WILSON, M. D., SALISBURY, MO.

[*Read before the Missouri State Medical Association, May* 13, 1885.]

WHATEVER may be the cause of typhoid fever, it is clearly evident that the virus of typhoid is peculiarly obnoxious to nutrition, especially involving the subsidiary or reserve circulation, the lymphatic system, thus essentially tending to a localization in the glandular apparatus of the digestive tract.

The gravity of any given case of typhoid fever may be due to causes other than the virus itself. Constitution etc., may so modify or resist the toxemia as to prevent the occurrence of the local lesion, or vitality may be so utterly at fault as to portend death as an almost inevitable result; hence the fallacy of statistics as generally given without due regard to all the essential conditions. In illustration of this we may instance the walking typhoid patient in contrast with a typical case. Why in the one case is the patient able to be on foot throughout the whole course of the disease, complaining of headache and debility as the only evidence of the zymotic struggle that is going on within, whilst the other is placed *hors du combat* at the very outset? Both patients have been subjected to the action of the same virus, and the zymotic process is identical in all cases, and

what but the difference in the make up of constitution and the widely varying conditions of the system at the inception can cause the marked contrast in the manifestation of morbid phenomena? In this contrast we have a full explanation of the reputed success of so many different methods of treatment, and it justifies us in stating that many a fever-tossed mariner comes safely into port although pelted promiscuously with murderous missiles. It is a grave error to predicate a treatment upon the hypothesis that the reduction of the preternatural heat is the great desideratum. Thermal elevation is an essential factor, a constant concomitant of zymosis. If it were possible to abstract the abnormal heat or "put out the fire" it would only be a suspension of hostilities, an uncertain truce of hibernation; the disease would thus only with lessened pace "drag its slow length along," but Banquo's ghost "would never down" till the zymotic process once inaugurated culminated in a vital modification of every ultimate tissue so profound as to secure, as a rule, immunity from recurrence. In the zymotic process, as in variola, scarlatina, typhoid, etc., the evolution of preternatural heat is an absolute essential. It is paradoxical to state that we may have typhoid fever minus the fever—thus to reason we would be abundantly justified in the abstraction of heat, even resorting to the ice-box to expel the intrusive but deadly foe. But to hold thus is but another guise of the once popular but now exploded abortive plan of treatment. The evolution of heat is incidental to all the vital activities of the animal organism, whether normal or beleaguered by disease. Increase of function normally augments tissue change attended by an explosion of energy resulting in the production of heat; but, however intense the functional activity of the body, it never increases the temperature above the normal more than one degree centigrade, and hence where the physiological boundaries are passed additional increments of heat are superadded in the manifestation of pathological phenomena.

In typhoid fever the system is impregnated with a specific virus enkindling a morbid process that is self limited—self limited because it is a constitutional infection, and hence through the medium of the circulation every elementary tissue must

of necessity have its vital activity impressed and modified by the *materies morbi* before the cycle of zymosis can be completed, and when the zymotic process has once set in it is plainly manifest that it is impossible to arrest its progress till every tissue element has been subjected to the action of the special poison, and it is this action of the poison upon the system that develops pathological oxidation, resulting in preternatural thermal conditions, and through *abnormal oxidation alone* can the system free itself from the uninvited guest. Death may impend from functional nervous disturbance, eventuating in the dethronement of the inhibitory thermotoxic nervous mechanism, thus practically surrendering the vital forces to the morbid process, permitting oxidation to run unchecked beyond normal limits.

There is no known therapeutic agent that can depress bodily temperature, although it is claimed that alcohol is a depressant, whether used in physiological or pathological conditions. Alcohol when given in pathological conditions does not depress or lower an already existing high temperature, but as it is life itself to the empoisoned system it prevents undue oxidation by restoring to the tottering nervous system its wonted control over the thermogenic tissues.

Alcohol, opium and quinine inhibit the thermotoxic forces, thus restraining and regulating the production of heat, but in nowise acting as depressants. The application of cold does not abstract heat, for after a time the conductivity of the skin is so lessened that instead of abstracting the heat it defeats its own purpose by having the opposite effect, viz., the retention and accumulation of heat causing internal congestions frequently resulting in hemorrhages—the *dernier ressort* of nature to counteract harmful treatment. Putting out the fire with water may answer the purpose in a burning building, but not so in the animal frame beset by a zymosis—in the one case combustion is destruction but in the other, as "a little leaven leaveneth the whole lump," so the combustion is but the pathological expression of a specific fermentation of living animal tissue. As high temperature is destructive to digestion, it is vastly more important to endeavor to anticipate high thermal conditions than to attempt the highly problematical reduction when once established.

To obviate the tendency to localization is to obviate the tendency to death, as the functional disturbance precedes the local lesion, but localization never occurs to any serious extent if elimination keeps pace with the morbid process. Food is of the first importance throughout the whole course of the disease to support the economy and maintain the integrity of the nervous system, and thus prevent the accession of a lethal bodily temperature, but alimentation is not only futile but absolutely detrimental when the temperature exceeds forty degrees centigrade, as digestion cannot take place when this point of elevation is reached.

Special treatment should be directed to meet indications only as they arise. Calomel in a sedative dose at the outset in some cases—in others none; if the kidneys respond well no diuretics—no constipation, no laxatives or cathartics; no diarrhea, no astringents. Quinine for much daily variation of temperature. Alcohol and opium for persistent elevation of temperature when it exceeds 102° F. in the morning and 103° F. in the evening.

EXCISION OF THE HIP-JOINT.

BY N. B. CARSON, M. D.

[*Read before the St. Louis Medico-Chirurgical Society, May* 19.]

I HAVE here a specimen excised from the upper portion of the femur of a young man nineteen years of age, who several years ago, came into the Sister's Hospital with all of the symptoms of necrosis of the bones of the hip-joint, the result of an earlier disease of that part. I have thought it might be of some interest to the society to have in conjunction with this specimen a compilation from the different authorities, giving the result of the operation as performed by them, as well as my own limited experience.

I was led to this conclusion by a question asked me at a former meeting, when discussing excision of the joints, particularly that of the knee-joint.

When the young man from whom this specimen, which is the trochanter major and part of the upper portion of the femur, about three inches in all, first came into the hospital, he gave the usual history of hip-joint disease without injury, resulting in abscess. At that time he was pale, wasted, and looked anything but well. There were several sinuses, discharging freely, leading down to diseased bone, of which several pieces had come away at different times, previous to his entrance into the hospital. After his health had somewhat improved by proper treatment, one or more of the sinuses were enlarged, and the necrosed head of the femur was removed. After that the sinuses healed, and he had no further trouble until about the beginning of the present year, when the sinuses again opened and discharged freely, reducing him greatly. Some time in February he again entered the hospital, and again I removed a small piece of dead bone. After this he improved somewhat, and again left the hospital. This time the openings did not close, and as his health was on the down grade, he again entered, to have the offending cause taken away. This I did on last Saturday, three weeks ago (April 25). By means of a large semi-circular incision, I removed this specimen, comprising, as I said before, the trochanter major and upper part of the femur. The subperiosteal operation was done, and the patient placed in wire breeches. He has improved steadily since the operation, and at this writing is daily gaining health and strength. The diseased limb, which was four inches shortened, has been drawn down until now there is little more than two inches difference between the well and diseased limbs. While it is yet early to say what the result is going to be, it at present looks promising, and I hope at some future meeting to bring the patient before you, in order that you may see the result, be it good or bad.

Several years ago I made my first excision of the hip-joint. The patient, a young man some twenty and odd years of age, came into the hospital, and gave the following history: At an early age he had received an injury of the hip, which was followed by inflammation of the joint, which resulted in abscess. This was opened at that time, and had been discharging ever since. Other openings had formed at different times subsequently, and continued to discharge. The limb was about five inches shorter than

the sound one and much discolored from the hip to the ankle, looking like the limb of a negro. It was also covered with quite a growth of hair, while the sound limb had a very light growth. At the time of the operation the head of the femur although separated from the shaft, still remained in the acetabulum. The trochanter had formed a false joint above and posteriorly on the surface of the ilium. I removed the necrosed head and neck, also the upper portion of the shaft of the femur, and a part of the acetabulum, which was diseased. The patient was placed in bed after the completion of the operation, and a Buck's extension and sand bag applied. He did well for several days, but died—I think it was the eighth day after operation—of tetanus.

I have taken away several times diseased parts of this joint from different subjects with excellent results, the openings which had been discharging for years healing up. I have not the time to look up notes of these cases, to be able to give them in detail, and therefore have to thus generalize.

My average is not much to brag of, but still it is not much worse (if the case I have on hand recovers) than that of most others; as you will see from the following statistics. Barwell, in his work on Diseases of the Joint, says the reports of six large metropolitan hospitals give a mortality of 45.73 per cent., which he says is large. The same author, quoting from Croft's paper, gives 45 cases, 2 of which he excludes because the results were uncertain, and 11 cases, because they were still under treatment at the writing of the paper. Of the remaining 32 cases, 16, or 50 per cent., died. He says he thinks that from 40 to 45 per cent. may be taken as the average rate of death. The foregoing relates to the operation when done for disease of the joint. The same authority puts the ratio of death for excision in recent injuries at nearly 100 per cent. This, so far as it relates to gun-shot wounds, is confirmed by statistics collected during our late war, and those subsequent to it. Up to the time of our war the hip had been excised 16 times for gun-shot injury, with one recovery. During our war 66 cases are cited, of which 33 cases were primary; of these 32 died and 1 recovered, a mortality of 96.9 per cent. Twenty-two were intermediary; of these 20 died, and 2 recovered, a mortality of 90.9 per cent. Eleven were secondary;

of these 8 died, and 3 recovered, a mortality of 72.7 per cent. This gives a total of all cases of 90.9 per cent. of deaths.

Since our war 99 cases of excision of the hip for gun-shot injury have been recorded, of which number 86 died and 13 recovered, giving 86.8 per cent. of deaths, a slight improvement on the record made during our late unpleasantness. Bryant, in his work on surgery, cites the records of cases made by Hodges up to 1861; by R. R. Good, of Kentucky, who gives a record from 1861 to 1868, and from the report of the committee of the London Clinical Society, published in the 14th volume of their transactions 1881. Hodges' table comprises 111 cases, of which 56 recovered and 55 died. Good gives 112 cases, of which 52 recovered and 60 died.

The Transactions of the Clinical Society cites 203 cases of excision of the hip, of which the mortality was 40 per cent. Mr. Bryant himself claims 30 cases operated upon with but 5 deaths.

Mr. Holmes, in his work on Surgical Diseases of Children, records 19 cases, of which number one-third died. Erichsen, in his last edition, says the result of his own experience is that the mortality directly referable to the operation itself is but small. He does not give the number of his cases. In a former edition he gives 12 cases with 2 deaths.

Ashhurst Jr. claims 21 cases, with 13 recoveries, 6 deaths and 2 still under treatment.

Sayre records 59 cases, with 20 deaths and 39 recoveries.

It will be seen from the foregoing that the mortality is nearly one-half of all operated. It will also be observed in the foregoing that in the hands of some the operation is more successful than in the hands of others. This may be accounted for, I think, by the fact that some surgeons meet more cases of advanced age than others, as it has been established that the patients between five and ten years of age bear the operation best; and that with each additional year after the latter age the death rate increases.

Of those that survive the operation, it is said, by some that about three-fourths have useful limbs. Barwell states that he finds that of those that survive 27 per cent have useful, about 46 per cent partially useful, and about 27 per cent utterly useless limbs.

The introduction of antiseptic surgery has not had any effect upon this operation. Ashhurst in the Encyclopedia of Surgery says, "that Frosch has collected statistics of hip-joint excisions done with antiseptic precautions, and finds that 166 cases gave 76 recoveries and 44 deaths, the result in the 46 remaining had not been determined.

Cheyne in his work on Antiseptic Surgery passes the subject of excisions by with the remark that antiseptic surgery has rendered the operation unnecessary since its introduction and, therefore, there are no statistics. With this I must beg leave to differ, as I often see cases where the operation is needed, Mr. Cheyne to the contrary notwithstanding.

That the operation is a justifiable one in spite of the great mortality and the imperfect result that follows in many cases there is not a question of doubt.

It resolves itself into a question of excising the joint and thus removing the cause which is steadily wearing the life away, or amputating the limb—an operation of almost as great mortality as excision—or allowing a patient to die without an effort to save his life, or if he should recover go through life all drawn out of shape.

QUARANTINE AT SUEZ.—The International Sanitary Congress at Rome arranged for a five days' quarantine at Suez for infected ships from the east and adopted a resolution declaring that a ship without a doctor cannot pass inspection. The English press are greatly exercised thereat, regarding this as a blow at England's commerce with the Orient. The English claim to regard quarantine regulations as useless. Scientists of other nations regard the English view as based upon a higher regard for pounds, shillings and pence than for the health and welfare of her own people and her neighbors.

DEATHS FROM ANESTHETICS IN 1884.—Dr. Ernest H. Jacob states that during the year 1884 there were reported in Great Britain nine deaths under chloroform, two under mixture of chloroform and ether, three under methylene, six under ether.—*Brit. Med. Jour.*, May 2, '85.

CASES FROM PRACTICE.

PECULIAR DISPLACEMENT OF THE ARM IN UTERO AT BIRTH.

BY EUGENE C. GEHRUNG, M. D.

[*Read before the St. Louis Obstetrical and Gynecological Society, May 21, 1885.*]

To report a very rare or unique case places one in a rather unpleasant predicament, particularly when there is no specimen whereby to prove one's assertions, since there are innumerable doubts, and an endless row of possibilities of error in observation, crowding the minds of his hearers. It is well that such is the case for one may observe honestly yet misinterpret what he has observed, and being misled himself may mislead others; therefore criticism should be applied unsparingly.

In the case I am to relate to you there is not only the absence of a specimen, but also absence of a professional witness to corroborate my statements. I shall therefore relate it just as it presented itself to me without further comment and let it stand upon its own merits or demerits, as the case may be.

Mrs. L. F.; primipara; æt. 28 years; very nervous, (terminating in a light attack of puerperal insanity); liquor amnii discharged completely the previous day at 11 o'clock P. M.; pains began at 2 o'clock P. M., on January 1, 1885. First stage, 11½ hours; second stage, 6½ hours. The child (male) was born at 7:30 A. M., January 2, weighing about 6½ pounds. Head presentation (L. O. A.), in which position the head was born, but when the shoulders presented the head stood in R. O. A., position. This spontaneous semi-rotation from first to second position, and vice versa, is a movement which may be relatively often observed. The umbilical cord was not wrapped around the neck, as I ascertained

by passing my finger from the thorax along the neck to the left ear. The space so crossed was found perfectly clear. The labor, though slow, was constantly and uninterruptedly progressing, and special assistance not called for. During a temporary lull in the pains, I proceeded to study the behavior of the shoulders in the process of their evolution, a subject which I had then under special consideration, and found, as intimated before, the left shoulder under the pubic symphysis, but though the shoulder was plump and round with a distinct axillary cavity underneath, yet there was apparently no arm attached to it. My first impression was that it might be the result of an arrest of development or of an intra-uterine amputation of the limb, but there being neither stump, nor

FIG. I.

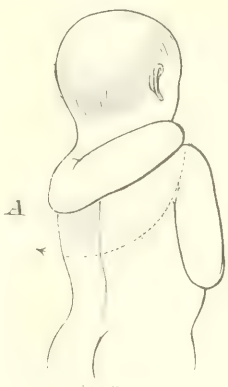

FIG. II.

cicatrix, nor rudimentary outgrowths present, I soon saw my error and searched for another explanation of the mystery. Passing my fingers from the shoulder towards the back of the child, a cylindrical ridge (the arm) was felt extending from the shoulder backward from left to right across the neck, where it terminated in a somewhat pointed body (the elbow) on the right shoulder, and there bending forward from right to left along the anterior part of the neck extended a similar ridge (the forearm) terminating in a hand, which rested on the thyroid cartilage. (See Figures I. and II.)

Then I understood that this was the missing arm. The anterior face of the whole arm and hand lay in close apposition with the neck all around, while the posterior surface was throughout its whole length turned away from the child. The hand rested under

the chin, the palmar surface over the larynx, the palm was extended, the little finger turned upward and the thumb downward, toward the sternum. Meanwhile the child was born to the hips, to which followed another calm. I supposed, as seemed so very probable, especially in a head presentation, that the arm had slipped over the head from above downwards and tried to slip it gently back again, when I discovered to my surprise that it would not move in this direction. This aroused my curiosity to a still greater extent and I began to investigate the case in full earnest. The shoulder, or the clavicle and acromion process, formed an obtuse angle to the neck, instead of nearly a right angle in the normal condition; in fact there existed a pronounced slope shoulder, with a well preserved axillary cavity underneath. From the posterior border of the shoulder could be traced the arm extending around the neck as stated above, while underneath the middle third of the humerus, in the position where the angle of the scapula should be was a marked depression (A Fig. II.) while the angle of the scapula itself was found in the spine near the vertebra prominens. The whole scapula had rotated on the subscapular muscles, partly dragging them along in its motion; the acromion process moving in the opposite direction to the angle also carried with it the scapular end of the clavicle and thus caused the inclination of the shoulder. On straightening the elbow and releasing the arm from the cervical depression, it was easily carried downward across the back from right to left, when everything resumed its natural position with a gentle snap. Before reducing the displacement I explained and showed the condition of the case to an aunt of the puerpera, who acted as nurse. Immediately after reduction I tried to reproduce the faulty position, using a moderate amount of force, but failed. This failure I ascribed to my want of knowledge of the exact mechanism of the primary process. The child used the arm and fingers just as well as those of the other side, almost immediately after the replacement. This case therefore was one of *spontaneous displacement of the whole arm from below upward over the posterior plane of the child, and during a head presentation.*

The authors of modern text-books on obstetrics, etc., content themselves by quoting a case first described by Simpson, while ancient authors do not mention the subject at all. Leishmann says: "A rare and curious cause of obstructed labor has been shown by

Sir James Simpson to arise from dorsal displacement of the arm. This may occur either in pelvic or cephalic presentations. In the former case, which is more frequent, it is probably due to an improper and imprudent dragging upon the limbs, the tendency of which is, as has formerly been shown, to allow the arm to pass up alongside of the head. * * *

In Simpson's case, the presentation was one of the head, in which the arm had in some peculiar way, which it is difficult to understand, got onto the nape of the neck, and was thrown transversely across the pelvis. The course suggested by him for the management of such a case is to bring the arm down by the side of the head.[1]"

"To quote more authors would be repetition."

The only description of displacements of the arm nearly resembling my case, I have encountered in Cazeaux's Midwifery. When speaking of the "difficulties of performing the pelvic versions," he says: "It is highly important to bear in mind that, according to the observations of Dugès, this crossing of the arms may take place in two ways, namely, they may be crossed behind the neck, after having been first raised up by the sides of the head, and then the overlapping is effected from above downwards and from before backwards, relatively to the fetus; or it may occur from below upwards, the arms then mounting up along the child's posterior plane, and becoming placed under the occiput. This latter circumstance may be produced in the following way: As the arms are usually located on the sides of the thorax, they may not participate in the movement of rotation impressed on the trunk in making an attempt to bring the anterior plane of the fetus towards the mother's loins; and consequently one or both of them may thenceforth be found placed on the child's dorsal plane. Then, supposing the tractions on the breach are continued, the arm will become arrested against the symphysis pubis, while the trunk descends or is extracted, in such a way as to be still there when the neck reaches that point. But these two cases can be distinguished from each other by remarking that, when the reversion of the arms has taken place from above downwards and from before backwards, the inferior angle of the scapula is necessarily removed to a considerable distance

1 Leishmann's System of Midwifery. 1879.

from the median line of the spine; while, on the contrary, *it will be quite close when the crossing has occurred from below upwards along the back of the fetus.*[1]" [Italics mine.]

This, at least, proves the possibility of such a displacement of the arm as described above. In my case the accident was not probably a recent one, since the arm was not only comfortably lodged in the depression of the nape of the neck, and the elbow on the shoulder, but the forearm was flexed and snugly ensconced along the anterior part of the neck, and, so to speak, protected by the inferior maxilla. My case differs further from those mentioned by Dugès, by having occurred in a cephalic presentation, and without any manipulation that could have produced such a result. Besides the distinguishing signs between these two modes of displacement mentioned by Dugès, there may be added two more; though of lesser importance, they may be instrumental in recognizing the peculiar displacement when the others may be overlooked, namely, in the displacement of the arm from above downward the corresponding shoulder is elevated, while in displacement from below upward the corresponding shoulder is depressed. Secondly, In the former the axillary cavity is filled by the head of the humerus, while in the latter the depression is well preserved. Whether or not these will be of any practical use remains to be decided by future observation.

The labor was rather slow, considering the size of the child. The slow progress, which, by the way, was a constant but uninterrupted one, I thought was satisfactorily explained by the total absence of the liquor amnii, though I now think the displaced arm acted to a certain extent as an impediment to a more rapid delivery. The first stage of labor was unusually painful and, in spite of the administration of rather large doses of chloral, without a moment's intermission in the pains. The dry labor and consequent more or less intense contraction of the matrix around the irregular outlines of the fetus, and the absence of the dilating bag of waters, satisfactorily, though possibly wrongly, explained to my mind the existing condition. There was still another cause present to explain this state of things, and that is anteflexion with its usual sequels of protraction and painfulness of the first stage of labor, as explained in a former essay of mine.[2]

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1. Cazeaux's Midwifery. American Edition. 1850. pages 653 and 654.
2. Effects of Ante-Displacements, etc.—Am. Jour. Obs., July, 1882.

How the displacement has occurred I am at present unable to explain. In fact I have not even a plausible theory, though it must have happened by a peculiar combination of circumstances during the prenatal gyrations of the fetus. I shall therefore leave it to the fertile imagination of my patient hearers to devise an explanation, which, however plausible, may yet be wrong. When once the attention is aroused as to the possible occurrence of this peculiar displacement, it may be met occasionally and may soon be satisfactorily explained. Since it may have a possible relation to the production of this displacement I shall mention, that after using Credé's method patiently for three-quarters of an hour, I was obliged to introduce my hand into the uterus and detach the placenta from a small point of attachment to the uterine wall and the membranes, which were extensively adherent, from within a diverticulum of the uterus.

The bearing of this contortion on the management of labor is almost insignificant, since the difficulties encountered during this act were sufficiently explained by other causes and, were it known beforehand to exist, nothing could be done to rectify it. Version would be worse than useless. Had the arm not been so completely protected by the opposite shoulder, the natural process of labor must have rectified the difficulty.

The only additional unusual condition I have observed that might lead to the supposition of the presence of this or a similar anomalous condition was, that during the passage of the head through the true pelvis, this (the head) was driven so forcibly towards the anterior plane of the fetus (flexion), or the right sacro-iliac synchondrosis of the mother, that on completing the rotation for the passage of the inferior strait, it appeared for a time unavoidable that the head would pass through the rectum rather than the vulva. The occiput refused for temporarily to adjust itself under the pubic arch and a rupture of the perineum seemed, for a while, to be imminent, though with due care the labor was terminated without more than slightly nicking the posterior commissure.

Having seen from the foregoing description that this particular displacement of the arm produced little or no impediment to the progress of labor, a lesson may be learned from it:

1. That, should it occur again in a cephalic presentation, it should be let alone, only good care should be taken to prevent rupture of the perineum by urging the occiput well under the pubic symphysis, and,

2. Should it occur with a pelvic presentation, since the arm cannot be brought down, it appears to me that it would be best to try to bring the forearm over the opposite shoulder and apply it, if possible, against the anterior face of the neck in fact imitate this case completely, depress and rotate the corresponding shoulder (that of the displaced arm) towards the perineum, thus the arm would offer the least resistance, and, as soon as the shoulders are born, could be freed from its malposition.

2128 Chestnut Street.

LIGATION OF SUBSCAPULAR FOR ANEURISM OF AXILLARY ARTERY.

BY D. V. DEAN, M. D., Sup't St. Louis City Hospital.

[*Read before the St Louis Medico-Chirurgical Society, Apr.* 21, 1885]

John Dovery, native of Germany, aged 48 years, single, laborer, ten years in the city, was admitted to the hospital, January 23, 1884. He was a thick-set, quite heavy man, with red, coarse skin, coarse structure and build, and quite stolid, accustomed to a plentiful drinking of beer all his life. He complained of deafness in his left ear and of soreness in the upper part of his left chest, and in same shoulder and arm, including the forearm. He said that he had had rheumatism for some months, but that about four weeks previous to admission, while driving, he fell from a malt-wagon, striking mainly on his left shoulder and arm, and since that time he had felt a swelling in front of the shoulder and a numbness and weakness of that arm and hand. On examination pulsation with marked thrill and bruit was found under the left clavicle connected with the left axillary artery. No difference could be detected between the radial pulse of the right and left wrists. There was a diastolic murmur near the junction of the second right costal cartilage with the sternum. Other heart sounds normal. Patient was treated with iodide of potassium and other alkalies, ordered to keep quiet, and digital and mechanical pressure were tried for a few moments to see if he would bear it; but it was difficult to keep him sufficiently still to completely or nearly stop the pulsation for any length of time. He was not willing to bear any continuous repetition of these efforts, but was anxious for an operation. I

explained to him the dangers and the chances, but by the twenty-second of the month the aneurism had begun to encroach upon the axillary close to the clavicle. Each pulsation could be felt to enlarge the vessel clean under the border of this bone. Patient stated to other patients in the ward that if I did not operate on him he would go and make way with himself, and, on consultation, I decided to operate February 24. I had noted in the literature of the subject that, while the mortality was great, a quite large proportion of the deaths came from secondary hemorrhage. With an experience of eight years in the hospital, using almost exclusively antiseptic catgut ligatures, I had not had a single case of secondary hemorrhage from any operation (I can now add another year's experience of the same kind). While even Lister seems anxious for something still better than this ligature for deligating vessels near the heart, and but few surgeons seem to advocate its use in those cases, I felt that this ligature offered me the only exceptional favor in the case. About this time I learned from Dr. Wesseler of the Alexian Brothers' Hospital that, while the patient had been treated for malarial troubles and rheumatism a considerable length of time in that hospital, the aneurism had been detected some time earlier than the dates given by the patient to me; so it was a question as to how much, in its formation, was due to rheumatic and how much to traumatic causes.

February 24, with the assistance of Dr. Spiegelhalter and Dr. McCandless, and, in the presence of Drs. Nelson and Steele and of the hospital corps of assistants, I operated, deligating the third surgical division. I brought the integument covering the region down upon the clavicle, making an incision on its body from the clavicular portion of the sterno-cleido-mastoideus to the inner margin of the trapezius, when the skin instantly retracted, leaving the superficial veins intact. On going deeper to the connective and fatty tissues a branchlet from the supra-scapular vein was cut, which caused a little delay in the operation. Otherwise no trouble was met with, the vessel being easily separated from its surroundings, the inner chord of the brachial plexus, the internal jugular and the phrenic nerve all being distinctly visible and separate from the vessel, which was in its normal position close to the tubercle of origin of the scalenus anticus muscle, and the pulsation being easily stopped by pressing the finger against the underlying aneurism hook. A single strong catgut ligature was ap-

plied, iodoform freely scattered in the wound, in which a small tube was left, the lips of the wound sutured, except the external end left open for the exit of the drainage tube. Not only did the pulsation, thrill, and bruit of the aneurism entirely cease but the tumor itself disappeared, and the aortic bruit ceased also. The brachial pulse entirely ceased. It required much ether to anesthetize the patient, who vomited considerably after the operation, but rallied well.

The next day at noon and at 7 P. M., his temperature was 37.7° C., being two-tenths above normal; on the next day it was 37.4° in the morning, 37.2° in the evening.

February 27, temperature 37.1°, and the radial pulse was detected.

February 28, temperature was 36.8°. The pulse ran along 37.3° to 37.4.

February 29, on which day the sutures were removed, the wound had united by first intention except the place of exit of the tube; this was also the place where the catgut ligatures were applied to the severed vein. Some little suppuration existed at that point for some time. Patient seemed not to have suffered in any way whatever, though his bowels had not been moved since the operation. Physic was given and good action obtained March 2. It was necessary to continue mild cathartics to keep any regular action. Pulse in the left arm scarcely perceptible.

March 7. In the afternoon the patient did not feel so well and ate no dinner.

March 8. The pulse could again be felt at the left wrist and patient sat up some fifteen minutes in a rocking chair. He continued improving, but on March 13 complained of some pain in his left arm.

March 17. Patient was up and going about.

March 23. Complained that he felt pain in the seat of aneurism for three days.

March 24. In the morning there was a considerable tumor in the seat of the original one with pulsation especially plainly shown by the reflection from a small mirror laid upon its surface.

March 26. The bruit was quite distinct in the tumor and the radial pulse was much stronger than ever before; and at 8 P. M. neither I nor others could get a bruit by immediate auscultation; though the pulsation continued.

March 27. Bruit and pulsation were absent.

April 8. There had been no reappearance of bruit or pulsation; the apex beat three-fourths of an inch below the nipple. There was still a murmur between the first and second cartilages one-half inch to the right of the sternum. Patient expressed himself as feeling "so ziemlich."

September 30. There had been for several days a decided prominence about the point of operation and below the clavicle, seeming to go and come. Patient still complained of unpleasant feeling about the shoulder and arm to the ends of the fingers.

January 31, 1885. A distinct sound was still heard near the junction of the cartilage of the second right rib with the sternum, appearing, however, to change in position from time to time.

March 30. Nothing abnormal except the unpleasant feeling in the arm and the diastolic aortic bruit, the radial pulse much less than that of the right wrist but very good.

February 9. Precisely the same condition. Patient was examined on that day by Dr. P. G. Robinson, as well as myself and others.

February 12. Patient discharged. From the day of the operation there was no perceptible difference of temperature in the hands.

Patient took much pride in his physical strength; was one of those men who would use brute force in work where exercise of a little skill would save strength. He insisted on pushing our heavy lawn mower in the fall months, dragging and lifting the long heavy garden-hose for sprinkling the grounds, etc. We could not convince him that his left arm would never be as good as his right, and he constantly complained that he could not lift a chair at arm's length with that arm as well as with the other. He believed that practice would make perfect. As I was sure he would overdo outside, I kept him longer than I would otherwise have done, doing as light work as he would do, that we might put off any bad result before the collateral circulation should be well established. With any person of ordinary discretion I should have had no fears of the result after the first few weeks.

With the exception of not being quite so strong in his left arm, and that he was right-handed, there was no material difference in the use of his two hands and arms in every way.

EDITORIAL.

SHOP-HOURS.

A bill has been presented to the British Parliament to regulate the number of hours of work that may be required of shop-assistants and clerks in that country. In 1870 an act was passed by Parliament called the "Factory and Workshops Act," which regulated the work-hours in factories and work-shops in which young people are employed. Taking the ground that young persons employed in shops and stores are as much entitled to protection as those others Sir John Lubbock has introduced the bill referred to above. A public meeting in support of the bill was held in Exeter Hall early in May in support of this bill, at which there was but small attendance. It was argued by the friends of the movement that this fact, instead of indicating a lack of interest, was a strong evidence of the necessity of such action, inasmuch as the people who are most deeply interested were unable to be present at a meeting on a week-day evening, and meetings on Sunday had been attended by several thousand people.

It is claimed that nothing is gained by inordinately long hours, that in fact more work might be done in a shorter time.

It has been estimated that the average working week of shop-assistants is from seventy-five to ninety hours; and it has been claimed that the proprietors have been forced into these long hours by excessive competition, and that a majority of them are quite as anxious for the enactment of the bill as are the shop-assistants.

The *British Medical Journal* takes an active interest in the matter and strongly favors the bill.

THE ONE-HUNDREDTH VOLUME OF VIRCHOW'S ARCHIVES OF PATHOLOGICAL ANATOMY AND PHYSIOLOGY AND OF CLINICAL MEDICINE.

No man occupies a more prominent position as an authority in pathology and immediately allied sciences than Prof. Rudolf Virchow of Berlin; probably it is not saying too much that he outranks all his contemporaries. The "Archives," first published in 1847, preserves the records of his achievements together with those of his fellow-workers, justifying the pardonable boast made in the leading article of the one-hundreth volume, just issued: "The Archives contain a series of works that have changed the foundation of the tenets of pathology and in part of biology; the history of the progress of Medicine will always be compelled to refer back to them." Virchow declared at the outset the scope of this great work: "This is not the day of systems, but the day of special investigation. It should be recognized that only steady, patient and painstaking work, the faithful labor of observation or experiment, has lasting value. Pathological physiology will then gradually be developed, not as the outcome of a few hasty theorizers, but as the combined product of many painstaking investigators—pathological physiology, the citadel of scientific medicine of which pathological anatomy and the clinic are only the outworks."

In justification of this prospectus we find in the course of time developed the grand discovery of the principle of the "cellular pathology," which has revolutionized medical theory—a discovery not the outcome of vain theory but based upon accurate and carefully recorded research. Virchow concludes his retrospect with these words: "The German school has educated more capable young scientists than were formerly present in the whole world, they are widely scattered over the continents. We can therefore hope that material will not be lacking to fill new volumes of the Archives with good work, and to assure it in the future the same honorable place that it has won in the past."

The influence of the German school has made itself felt in our own country to no small degree. During the past twenty years young graduates in medicine, in yearly increasing numbers, have sought the medical centres of Germany to learn directly from the men who with Virchow have done so much to illumine the dark places and to rescue the practice of medicine from mere superstition and blind empiricism. The writer well recollects the inquiry made of his class of Americans, by a teacher at the Vienna University now most eminent in his department, whether they wished to study the subject *gruendlich* or *oberflaechlich*, thoroughly or superficially; the question implied familiarity with American methods. We are too hasty in our efforts; as a nation we are impatient of action; that, according to the proverb, is slow but sure; we are inclined to make haste and take our chances. The tendency of the German school is just the reverse, and no intelligent American can fail to profit by contact with the enthusiastic yet patient workers that abound in the schools of that country. Virchow's Archives embodies modern German thought that has accomplished so much, in the quoted dictum, "only steady, patient and painstaking work, the faithful labor of observation or experiment, has lasting value."

ENTERITIS FOLLOWING THE USE OF CORROSIVE SUBLIMATE IN THE ANTISEPTIC TREATMENT OF WOUNDS.

In *Virchow's Archives* (Vol. 99, p. 276) appears a paper by Fraenkel, which gives an analysis of fourteen fatal cases of sublimate poisoning occurring in the Hamburg General Hospital during a period of two and a half years. The cases were in the surgical ward; seven were of abscess; two, caries of the vertebræ with abscess; a psoas abscess; a case of amputation of the upper thigh in senile gangrene; an amputation of the breast for cancer; a myotomy;

a laparotomy with excision of the body of the uterus and right appendages, on account of myomata; a case of supra-hepatic operation upon an echinococcus cyst. All these patients were anemic, or exhibited a general adiposity, especially of the heart. In all the cases large surfaces of the body, either externally or internally, were in contact with the sublimate. The most conspicuous clinical symptom was bloody diarrhea; salivation or stomatitis were not observed.

Fraenkel considered the drug to be the direct cause of death in two cases only—extirpation of mamma and multiple gangrene of the skin of both legs. The pathological character of the enteritis was invariably excessive inflammation of the intestinal mucous membrane, resulting in necrosis of that structure; the colon was chiefly the seat of the lesion, the small intestine being exceptionally affected and never without the colon. The worst cases exhibited a condition of the intestine altogether similar to that of the severest true dysentery. Other organs presented no involvement.

Fraenkel advises care in the use of the antiseptic when the patient is badly nourished or in cases of excessive accumulation of fat. The drug should be used in the weakest practicable solution and superfluous deluging of the wound should be avoided.

THE BASAL PATHOLOGY OF CHOREA.

Prof. H. C. Wood, M. D., in a paper read before the College of Physicians of Philadelphia, states that he has come to some definite conclusions concerning the basal pathology of chorea, which we are glad to present in brief, though largely in his own words, to our readers.

The first point which he notes is, that the term chorea is analogous to the term paralysis, and that choreic movement is no more the same thing, necessarily, in its basal pathology, than is palsy the same thing in its basal pathology. When we study the various forms of disease closely connected with choreic movements, we

find, in the first place, the so-called cerebral or post-hemiplegic chorea, in which, after cerebral palsy, there appear violent convulsions with choreic movements. There can be no doubt that, in many cases, the lesion is situated in the seat assigned to it by Professor Charcot, in the corona radiata, near the lenticular nucleus; but, on the other hand, it is equally certain that there have been cases of so-called post-hemiplegic chorea in which the lesion has been in the external capsule and in the cortex. We may, therefore, say that this post-hemiplegic chorea is associated with various lesions in the brain, so far as seat is concerned.

We are forced to the conclusion further, by indubitable evidence, that we may have post-hemiplegic chorea, without lesion, and hysterical in its nature.

Studying the more general forms of chorea in the adult as well as in childhood we find the same truth, viz., that we may have a chorea dependent upon lesion of the brain in various seats, or independent of any lesion whatsoever in any portion of the nervous system.

Dr. Wood has been making careful studies of chorea in the dog. It has been affirmed, he says, that chorea in the dog is different from chorea in the child, for the reason that in the dog the movements are chiefly rhythmical, whereas in the child they are not usually rhythmical; but he has seen dogs with absolutely arhythmical chorea, and with all the awkwardness of chorea of children; and, occasionally, we have more or less of the rhythmical type in children. When we come to look at the points of resemblance in the two diseases we find: first, that in each case it especially affects the young animal; second, that in each case the disease is associated with a constitutional disorder—distemper in the dog, rheumatism in the child; third, the symptoms are exactly analogous, except that there is more tendency to rhythm in the one than in the other; fourth, the clinical experience of veterinarians and of physicians has led to the same result, viz., that arsenic is the best remedy for chorea in the dog, and for chorea in the child.

In order to settle the seat of the lesion, Dr. Wood cut the spinal cord so low as not to interfere with breathing. The choreic movement invariably continued after section. Before the section the motions of the front and hind legs were synchronous,that is,a wave of motion starting in the front paw would pass down the hind foot; but after the section this synchronous movement was wanting. The hind legs were completely isolated from the upper portion of the nervous system, and yet continued to exhibit the choreic movements, proof that the movements originated in the spinal cord, and, in all probability, in the motor cells, because when he galvanized the bared sciatic nerve, although the animal exhibited no signs of pain, the movements in the hind leg were at once inhibited. The galvanism of the sciatic nerve could only affect the motor cells. Therefore he came to the conclusion, physiologically, that the movements originated in the motor cells of the spinal cord.

When he first examined the cord he perceived nothing wrong beyond an infiltration with leucocytes resembling that described by Gowers and Sankey, who regarded this as constituting the basal pathology of chorea. However, he found the same leucocytes in the cords of healthy dogs. As he studied the specimen more closely, he found that the motor cells refused to take the carmine and hematoxylon staining as they should do. Then he took the cord of a dog which had died of the disease, and found the lesion in the motor cells very marked. They were crumpled up, the processes were gone, and the nuclei had disappeared. They were merely masses of matter, taking very little staining, just enough to show that they were protoplasmic. As he killed dog after dog in different stages, he found the motor cells in all stages of degeneration, first, the perfect cell, then the cell which stained badly, then one with nuclei disappearing, the margins becoming obscured, the processes dropping off, and opacity occurring, and, finally, the irregular protoplasmic balls. In a few cases he noticed peculiar degeneration, *i. e.*, the formation of vacuoles in these cells. A change, then, in ganglionic cells is what he believes to be the basal lesion of chorea.

Some years ago, Putnam, of Boston, studied chorea in the cat. In the first case he found no lesion, but in the second he found this same lesion not only in the cord but in the whole nervous system.

INFECTIOUS PNEUMONIA.

The old doctrine of the nature of pneumonia has been somewhat shaken by the views advanced by several distinguished authorities who would ask us to consider the disease as a specific fever, and that the lung lesion should only be considered as part of the general disease. Recently we see a still further advance, for we find in the *Journal de Medicine et de Chirurgie* the doctrine advanced by Prof. Germain Sée and M. Bath that croupous pneumonia has a parsaitic origin and that it should be classed not among the inflammatory diseases, originating from cold or exposure, but rather with those dependent on micro-organisms. As an argument in favor of this view the fact is cited that pneumonias occur frequently in epidemics attacking a number of people in the same manner as the accepted infectious diseases.

The occurrence of complications so frequent in pneumonia, such as acute nephritis, ulcerative endocarditis, meningitis and pleuritis, are cited to support the infectious nature of the disease due to the presence of some morbid agent which has the faculty of reproducing itself in the body. Prof. Sée does not consider croupous pneumonia to be a general specific fever but a localized inflammation, the inflammatory process originating not from exposure to cold but due to specific parasite. As long as this micro-organism is confined to the pulmonary structure, a simple pneumonia will be the result, when, however, it involves other organs, or enters into the circulation either by the lymphatics or the vascular system the case becomes one of infectious pneumonia. It is claimed that the necessary parasiite to substantiate this theory has been demonstrated

by Friedlander in Germany and M. Talamon in France. M. Talamon claims to have found in the hepatized lung a micrococcus of a somewhat elongated shape resembling a grain of barley. Friedlander claims to have found also a micrococcus enveloped in a characteristic capsule.

It has been demonstrated that the injection of culture-fluids of this micrococcus in animals has resulted in the production of croupous pneumonia. In cases where the micrococcus has invaded the pleura or pericardium it has caused pleurisy or pericarditis.

TO DISTINGUISH BETWEEN BUTTER AND BUTTERINE.— John Horsley, F. C. S., gives the following in the *Chemical News*: Have ready two small but wide-mouthed glass test-tubes, about four inches high, with feet attached. Into one put a piece of butterine or oleomargarine (about the size of a hazel-nut), and cork this tube; into the other put a similar piece of pure butter, and cork that tube; next take one in each hand at the bottom: in ten minutes the butterine melts into a clear oily fluid by the mere heat of the blood (98° F.). Pure butter takes twice as long to melt as butterine, and even then is not so clear and oily as butterine, which is a noteworthy difference between them; this is the physical test. For the chemical test, after the tubes have stood to cool for a few minutes, pour on ether to about one third of the tube, and cork well. Agitate the tubes—one in each hand—clasping them well. The butterine readily dissolves into a clear liquor, which the addition thereto of 20 or 30 drops of spirits of wine does not disturb or precipitate; but a similar experiment with pure butter produces a voluminous white precipitate. Hereby we can easily distinquish one from the other. Even butter adulterated with a portion of oleomargine or butterine may be detected by a precipitate being formed.—*The Pharmacist*, May, '85.

PROF. P. L. PANUM.—We regret to be obliged to announce the death, May 2, of the distinguished Danish scientist Prof. P. L. Panum, president of the last International Medical Congress at Copenhagen.

BOOK REVIEWS AND NOTICES.

LECTURES ON THE PRINCIPLES AND PRACTICE OF MEDICINE. Delivered in Chicago Medical College, Medical Department of the Northwestern University, by NATHAN SMITH DAVIS, A. M., M. D., LL. D., etc. *Chicago: Jansen, McClurg & Co.*, 1884. 8vo; pp. 896; cloth. (St. Louis. J. H. Chambers & Co.)

This volume of lectures is one in which we have been much interested. It is eminently practical and the author's many years of experience in hospital and private practice have given him admirable opportunities of which he has well availed himself, while his years of experience as an instructor have enabled him to formulate his knowledge in such a way as to interest and impress the reader, whether student or practitioner.

Two things in particular we have noticed in reading Dr. Davis's lectures. The first is that he by no means accepts the recent advanced views as to the etiology of various diseases. In discussing phthisis he says: "Very recently Koch has discovered in the tubercular mass in the lungs and more readily also in the matter of expectoration, an organic germ styled 'bacillus tuberculosis,' which he claims to be peculiar to this form of disease. * * * That the bacilli or minute organisms may be found in the sputa there can be no doubt. The conclusion, however, that these organisms are the essential cause of tuberculosis, and that the tubercular deposits, with all the subsequent changes, start from inoculation of these bodies either inhaled through the lungs or in any other manner introduced into the system, has been altogether too hastily drawn. * * * And it is more than probable, in my own estimation, that mature investigation in the early stage will lead to the final conclusion that the bacillus tuberculosis is only an accompaniment of the degenerative changes in the tubercular masses wherever found, thereby destroying the idea of their causative influence or of their playing an essential part in the propagation of the disease." (p. 460.)

Concerning the etiology of typhoid fever he says: "There is,therefore, no proof of the existence of a special fever germ, or specific organic poison. either in the fresh evacuations of typhoid fever patients, or in the diseased structures of those who have died from the gravity of the fever. Consequently the very general assumption that the essential cause of typhoid fever is a special organic germ, capable of being propagated in the evacuations from those sick with the disease, must be regarded as a mere theoretical dogma." (p. 83.)

Similar views are expressed with reference to other diseases which most recent pathologists have referred to the morbific agency of bacteria.

The other feature of these lectures which has specially impressed us is the uncompromising and decided opposition which he shows toward the use of alcohol in the treatment of disease. We know of no other author of any systematic treatise on the theory and practice of medicine who takes such decided ground on this subject.

The almost universal practice in late years has been to use alcohol freely in the treatment of diseases in which there is great prostration of the nervous system, notably in typhoid fever. In regard to this particular disease he says: "In all ordinary cases of typhoid or other general fevers the continued use of alcoholic remedies, either fermented or distilled,from day to day, instead of strengthening the action of the heart and sustaining the functions of the system, positively adds to the embarrassments of respiration and capillary circulation and diminishes nerve sensibility, thereby favoring both passive congestions in the lungs, spleen and kidneys, and fatty degeneration in the muscular structure of the heart."

The closing lecture of the volume is entitled, "The Therapeutics of Alcohol," and contains an excellent résumé of his views on that subject as formed by thirty years of study and observation.

Whether or not the arguments which he adduces shall convince the mass of the profession of the expediency of abandoning the use of alcohol as a therapeutic agent, all intelligent practitioners will be desirous to know the views and modes of practice of so able and successful a practitioner as Dr. Davis, who has for many years discarded this much used agent.

We trust that in issuing another edition of this work greater

care will be taken in revising and correcting the proof as there are a good many typographical errors as well as some inaccuracies of expression which ought to be corrected. N.

THE YEAR-BOOK OF TREATMENT FOR 1884. A Critical Review for Practitioners of Medicine and Surgery. Contributors: J. Mitchell Bruce, M. D.; T. Lauder Brunton, M. D., F. R. S.; Thomas Bryant, F. R. C. S.; Dyce Duckworth, M. D., etc.: *Philadelphia: Lea Brothers & Co.*, 1885.

This little volume presents to the practitioner a review by most competent authorities in various departments of medicine and surgery, of all work and observations which have been published in the medical literature of different countries during the year ending September 30, 1884.

The names of those contributing to the different departments are sufficient guarantee of the ability with which the work is done. Among these we note J. Mitchell Bruce, Diseases of the Heart and Circulation; T. Lauder Brunton, Diseases of Stomach, Intestines, Liver, etc.; Dyce Duckworth, Rheumatism and Gout. Thomas Bryant and Frederick Treves, General Surgery; Reginald Harrison, Diseases of the Genito-Urinary System, etc.

Such a volume as this is of great value in condensing the observations of the year and will make available and practical for general use many hints and suggestions for treatment which otherwise might be lost.

CEREBRAL LOCALIZATION IN RELATION TO INSANITY, with Cases. BY J. M. CARNOCHAN, M. D., etc. *New York: J. H. Vail & Co.* 1884. Large 8vo.; pp. 48; cloth. (J. H. Chambers & Co.)

The author in a very readable paper has given a brief but satisfactory exposition of the present status of the study of cerebral localization, not claiming too much or too little.

He starts out by following out the continuity of thought regarding the phenomena of mind from the ante-christian era to the present time. He thus reviews the scientific study of cerebral localization, beginning with Gall in 1796, mentioning those who have contributed the most to it, and the character of their work. As a result of their labors it has been determined that the brain is an aggregation of organs, and that the brain as a whole is the organ of the phenomena of mind. The functions of these many organs are performed separately or in various combinations.

Some of these organs may be diseased while others are sound, or all may be diseased at the same time. From these premises he shapes a definition of insanity: "A morbid condition of a whole or part of the brain, as manifested by correct reasoning from correct premises, and by incorrect reasoning from false premises, according to the kind of insanity.

Of course it is impossible at the present time to give a definition of insanity satisfactory to all thinkers on the subject. It is doubtful whether it is worth while trying to do so. But, it seems to us, the author of this paper has come nearer covering the ground than any we remember. At any rate his definition is much more scientific, and at the same time more simple and practical than many that we have seen. F. R. F.

DIAGRAM OF PARLIAMENTARY RULES. By URIAH SMITH. Second edition, revised. *Battle Creek, Mich.: Review and Herald Publishing Association*, 1885.

Any physician is liable to be called on to preside over deliberative assemblies, either medical societies or other organizations. *Every* physician should be a member of at least one medical society, if of no other organization. Hence a knowledge of parliamentary law is of advantage to every physician, and to some it is absolutely necessary in order that they may creditably acquit themselves of responsibilities which devolve upon them. In no way can one so readily acquire a serviceable, practical knowledge of parliamentary usage and rules as by the study of Smith's diagram, which is a wonderfully convenient and simple presentation of the subject and a means of ready reference.

THE SCIENCE AND ART OF SURGERY. A Treatise on Surgical Injuries, Diseases and Operations. By JOHN ERIC ERICHSEN, F. R. S., LL. D., F. R. C. S., etc. Eighth edition, Revised and Edited by MARCUS BECK, M. S., Lond., F. R. C. S., etc. With nine hundred and eighty-four engravings on wood. Vol II. *Philadelphia: Lea Brothers & Co.*, 1885. 8vo., pp. 1205. (St. Louis: J. H. Chambers & Co.)

We have already called the attention of our readers to the first volume of the newly revised edition of "Erichsen's Surgery" which has just been issued by the "Lea Brothers & Co."

In comparing this second volume with the second volume of the edition published by the same house in 1873 and on our table since then we notice very many changes. Chapter after chapter has been rewritten, others have been added. Increased experience

has modified the author's views in some respects and some subjects have been presented much more fully in the new than in the old edition. Many additional wood-cuts have been introduced and some of the old ones have been redrawn.

No word of special commendation of the work as a whole is needed. Everyone knows the value of Erichsen's surgery. We can only say that the revision brings the work fully up to the line of recent advances and puts it again in the first rank among treatises on surgery.

COMPARATIVE PHYSIOLOGY AND PSYCHOLOGY. A Discussion of The Evolution and Relations of the Mind and Body of Men and Animals. BY S. V. CLEVENGER, M. D. *Chicago: Jansen, McClurg & Co.* 1885. 8vo.; pp. 247; cloth; $2. (St. Louis: J. H. Chambers & Co.)

The work contains many original ideas, with some of which the scientific world is not unfamiliar, the author having contributed considerable to scientific literature of late years. Some of his arguments are attractive, as well as his exposition and applications of Darwinian and Spencerian theories, in which the book abounds. What he says about Sensation, and The Physics of the Sympathetic Nervous System, as well as other portions of the work, are quite entertaining. But, although it will be read by a few with admiration, it will not become, in a wide sense, popular, therefore it is not easy to estimate its value. F. R. F.

HAND-BOOK OF PATHOLOGICAL ANATOMY AND HISTOLOGY. BY FRANCIS DELAFIELD, M. D., AND T. M. PRUDDEN, M. D. *New York: Wm. Wood & Co.* 1885. Large 8vo.; pp. 575; cloth. (St. Louis Stationery & Book Co.; J. H. Chambers & Co.)

This book is a second edition of a previous one upon the same subject, but is notably enlarged with valuable additions. The arrangement of subjects and their discussion is well described in the preface: The point of view is that of the physician who wishes to find out the lesions of the diseases which he is in the habit of seeing rather than of the pure pathologist.

To further this intention the author avoids theorizing, collates the facts so far as known, and states the actual appearances. One can readily see the value of such a plan. Few have the time or means to hunt through voluminous authorities; such a book gives the whole matter as it stands in a brief space.

Methods of examining the dead body in the post mortem fill the first chapter, a special section being devoted to the examina-

tion of new-born infants. The best methods of preserving tissues for study form an appendix to this chapter. Then follows a systematic consideration of the morbid conditions of the blood and tissues, the several organs, etc., a simple and clear classification of tumors and of the bacteria as recognized by the best authorities. In the concluding chapters is given the lesions found in the general diseases, in poisoning, and in violent deaths.

The method of discussing the several organs is eminently helpful, as may be perceived in one illustration: The kidneys—malformations; changes in position; congestion; nephritis; embolism and thrombosis; hydro-nephrosis; cystic; calculi; tumors; parasites. —all is summed up in a few pages, at the same time without sacrifice of clearness. The last quality is secured by the abundance of excellent illustrations.

The authors ignore the distinction of croupous and diphtheritic exudations, using only the former term even when the familiar diphtheritic slough is implied. T.

KIRKE'S HAND-BOOK OF PHYSIOLOGY. By W. MORRANT BAKER, F. R. C. S., etc. and VINCENT DORMER HARRIS, M. D., Lond., etc. Eleventh Edition, with nearly 500 illustrations. *New York: William Wood & Company.* 8vo.; Vol. I. pp. 373; Vol. II., pp. 378; cloth. (Wood's Library.) (St. Louis Stationery and Book Company.)

The editors in preparing this eleventh edition of Kirke's Physiology have availed themselves of the results of all the recent writers on this subject and have incorporated into their work modern observations and views.

The volumes are intended specially for students and are well adapted for their use.

They form the February and March numbers of "Wood's Library of Standard and Medical Authors."

CLINICAL CHARTS. By JAMES C. WILSON, M. D. *J. B. Lippincott Company, Philadelphia.* Blocks containing Fifty Charts. Price 50 cents.

These charts are very conveniently arranged for keeping a clinical history with a minimum of writing.

Each chart will contain the memoranda for a case of sickness lasting three weeks. Scales of the Fahrenheit and Centigrade thermometers are placed at either side of the diagram for temperature observations, thus adapting it to the registration of the variations of temperature as observed by either form of thermometer.

Every device of this sort which facilitates the keeping of accurate histories of cases and minimizes the clerical labor of recording data is a stimulus to more careful study and observation of disease and will preserve material for statistical comparison which without such assistance will not be made available.

A MANUAL FOR THE PRACTICE OF SURGERY. By THOMAS BRYANT, F. R. C. S. *Philadelphia: H. C. Lea's Son's & Co.* pp. 1039; sheep. (St. Louis Stationery & Book Co.; J. H. Chambers & Co.)

This is complete in one volume, being the fourth edition, "thoroughly revised." It is a complete and yet compact review of surgery. The important points are concisely and clearly stated, and will serve as an admirable guide to the practitioner in his daily work. Mr. Bryant is one of the best surgeons of the time and he has a happy faculty of presenting clearly his views on surgical matters. He has as a student kept pace with the progress of his science and art. We do not find embraced in the practice commended, all of the new procedures, but perhaps all that as yet have received the full endorsement of the profession and are regarded as "accepted doctrines." It is the imprint of the personality of such a man as Mr. Bryant that is valuable and we can hardly expect him to set aside procedures that have in his hands accomplished good work for new and nearly untried theories. It is an advantage to have the book brought before us thoroughly revised at this time, for there are so many new and startling innovations that is a comfort to have some one present a comprehensive view of surgery from the stand-point of experience and a comprehensive judgment. I know of no better guide for the surgeon or general practitioner than this book. H. H. M.

BOOKS AND PAMPHLETS RECEIVED.

A Case of Psycho-Sensory (Affective or Moral) Insanity. By C. H. Hughes, M. D., St. Louis. (Reprint from the Alienist and Neurologist.)——On Idiopathic Anemia. By J. H. Musser, M. D., Philadelphia.——Insanity and Divorce, etc. By C. H. Hughes, M. D. (From Alienist and Neurologist.)——Dr. Seguin's Metric Prescription Book. New York and London: G. P. Putnam's Sons. 1885; paper; 20 cents. (St. Louis Stationery and Book Co).——Neuralgia and the Diseases that Resemble It. By Frances E. Austin, M. D. New York and London: G. P. Putnam's Sons. 1885. 8vo.; pp. 233; cloth, $1.25. (St. Louis Stationery and Book Co.)——Science and Art of Surgery. By John Eric

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TRANSLATIONS.

"NASAL POLYPS."

[CONCLUDED.]

BY DR. CHARLES CHIARI, DOCENT IN UNIVERSITY OF VIENNA.
[TRANSLATED BY DR. OTTO FORSTER, VIENNA, AUSTRIA.]

THERAPEUTICS.

1. *Mucous Polyps.*—Concerning prophylaxis, we may from the mere fact that these tumors arise from hypertrophy of the mucous membrane prevent their appearance perhaps by timely treatment of the chronic catarrh which gives rise to these hypertrophies. We must however, not forget that a special disposition is always necessary to their development with which we are unacquainted and which, therefore, we are not in condition to remove. Should the polyps have once appeared, their extirpation alone remains, since a spontaneous disappearance has only been exceptionally observed. This has been attempted from the beginning in different ways.

(1) By astringents and caustics. Inhalations of tannin, painting with tinct. opii crocata and alcohol, cauterizing with chloride of zinc, chromic acid or solid nitrate of silver fused on to thin sounds may gradually cause small polyps to shrink and fall off. Aside from the unpleasant irritation which these methods produce upon the surrounding membrane their results are so slow and uncertain that they have been given up by almost all physicians.

(2) To wipe away the polyps by means of a sponge. Hippocrates removed polyps by drawing a sponge fastened to a string through the nose from behind forwards. Voltolini employed this method once in the case of a young man whose nose was so narrow that neither the operation by the snare nor the galvano-cautery could be performed. He took a sponge 6 cm. long and 4 cm. broad, and drew it from the pharynx through the nose; the polyps

were then torn off. On account of the evident uncertainty this procedure is to be limited to those cases only in which all other operations are impracticable.

(3) The ligature, likewise an abandoned procedure, was formerly used by many surgeons, and a series of methods for its performance specified, all of which may be condemned by the difficulty of passing a loop of thread around soft polyps wedged into the nose. Besides, we must consider that it is not a matter of indifference to leave for days in the nose a body half or entirely dead, for only through modification of the tissue are the polyps destroyed.

(4) Moraud's method of introducing a finger from before and one from behind into the nose and in this way tearing or squeezing off the polyps, can only seldom find an advocate if we consider that generally the finger can be introduced only with fracture of the turbinated bones, and that also there is little prospect of removing all the polyps.

(5) On the other hand, extraction with the forceps has maintained itself to the present time; it is an old method and is at present employed exclusively by surgeons. One makes use of long forceps of different thicknesses with firm not springy blades, whose ends are somewhat spoon-shaped and toothed. They are generally introduced blindly without the use of a speculum, opened as widely as possible, and everything that comes between their blades is torn or twisted out. Polyps extending into the choanae are pressed toward them by the finger. In order to maintain a better, firmer hold of the contents they are provided at the posterior extremity with a closing contrivance. Even the introduction but still more the forcible opening, especially in narrow noses, produces decided pain and bleeding, since the healthy membrane is also squeezed and lacerated.

Dislocations and fractures of the septum are not infrequent injuries from it. This method succeeds only in removing those polyps lying quite free in the lumen, but they are mostly torn and incompletely removed and their mangled stumps and other small hidden tumors are left behind in the nose; one is generally satisfied to remove enough for the patient to blow his nose. The hemorrhage is rather profuse and the reaction in consequence of the squeezing and laceration of the mucous membrane so richly supplied with nerves is often great (headache,general malaise); indeed,

at Demarquay's clinic the death of a man 74 years old followed this method of polyp extraction. Voltolini treated a young man whose anterior nares had become almost completely cicatrized and was informed that these deformities had little by little appeared after different removals of polyps with the forceps. In spite of this cruel and energetic procedure a relapse soon occurs in most cases on account of the small polyps and polyp roots left behind, and one must therefore often repeat the operation. In order to protect themselves better against these quick recurrences some surgeons even gave the advise when possible to remove one or the other of the turbinated bones, especially the middle as the source of the new formations, but they forgot that polyps frequently arise from other parts of the nose which can not be torn out or twisted off.

In more recent times this procedure has been improved in that we introduce the forceps under guidance of a speculum,push them as high as possible on to the pedicle, then squeeze it andwith a gentle pull tear it off. In this way indeed the mucous membrane is not injured, especially when very slender forceps are used (as Schroetter) but one may be convinced after a few trials, that the forceps easily slip off and the polyp is generally not completely removed. Finally one can not penetrate well with this instrument into the narrow folds and corners where so frequently polyps have their origin. Therefore many voices have been raised against this method and specialists indeed seldom employ the forceps now, and then only for such polyps as can with difficulty or not at all be grasped by the snare; that is to say, such as are situated far back or extend into the choanæ. These may be reached either from before with a small forceps under guidance of a mirror or for those extending into the naso-pharynx a bent naso-pharyngeal forceps may be used. If the polyp is very large so that it pushes the soft palate forward it may, either with or without the guidance of the naso-pharyngeal mirror, be seized and twisted or torn off by forceps, introduced through the mouth. Should it however be small so that it is completely concealed by the retracted velum then we must either accustom the patient to relax the soft palate, or, if he cannot learn that, must draw it forward ourselves during the operation. This is best done in the following way: A ribbon as wide as the finger (Stork) or a drainage-tube (Schrotter) is introduced by means of a Bellocque's sound or an elastic catheter

through the mouth and naso-pharynx into the nose and brought out in front. The two ends of this ribbon or tube are then tied together in front of the mouth, and the patient himself can, without complaints of the traction on this loop, hold the soft palate away from the posterior wall of the pharynx. Aside from some flow of mucus and saliva from the mouth the patient experiences no annoyance; the operator, however, has sufficient room to seize the polyp with the forceps under direction of the mirror and remove it. Any small remnants left behind can be taken away with the snare, either from before or behind.

(6) The removal by means of the cold wire snare is a procedure, which chiefly from the recommendations of Zaufal has always found more supporters. We employ for this object snares after the style indicated by Wilde for aural polyps, only lengthened. One of the most convenient is that described by Blake. The wire is introduced through the narrow closed tube and its ends made fast to the moveable slide on the handle. This fastening was formerly accomplished by winding the wire around a small button, whereby, in consequence of the stiffness of the wire a secure fastening was seldom possible. For some time I have fastened the ends of the wire between two roughened plates by means of a thumb-screw and so made a loosening by drawing together the loop impossible.

The tube in which both wires run is very thin and straight or bent as desired, so that it is possible to enter even the narrowest parts of the nose with it.

Steel wire (so-called "piano-wire") of different thickness is generally used, because a loop formed of this material has enough elasticity to return to its former size after its introduction through narrow crevices. The instrument is employed as follows: Under guidance of the speculum the loop, opened according to the size of the polyp, is introduced vertically into the nose and carried to the top of the polyp. Then it is turned so far that the polyp slips into the open loop, and is carried along the body to the pedicle. That we have really reached this we can either see with the eye or judge from the resistance which prevents further progress. The loop is then closed, and in this way in a few seconds each polyp may be removed almost without pain and injury to the neighboring parts. The polyp is not indeed torn out, but only cut and squeezed off as with an écraseur. The vessels also are

pinched off, and so bleeding is generally unimportant and often entirely absent. At any rate it is easily and quickly stopped in most cases by snuffing up cold water. Should it not soon cease, it may be overcome by a tampon or compress of iodoform gauze. Syringing with alum or chloride of iron solutions is not so certain by far and irritates the healthy membrane too much. One may remove in this way as many polyps as seems best to him, generally not more than five or ten at one sitting. The operation is then suspended in order to avoid too great irritation of the nasal mucous membrane, which makes itself observable by great swelling, especially of the inferior turbinated bone.

Besides this swelling the blood-clots after a time obstruct the view. The operation must be repeated in the course of some days or weeks till at last no more polyps or polypoid hypertrophies can be found in the most remote parts of the nose. These latter also are removed with the cold snare. It is possible, in this way with some practice, without especial annoyance to the patient, without any rough seizing, without injury to the healthy mucous membrane to remove all these tumors although in more or fewer sittings (whose number corresponds essentially with the number of polyps). Indeed even in narrow crevices into which, from their location, we can not see it is still possible to introduce the loop and extract from them polyps without seeing them. We may do this without endangering the integrity of the remaining structures of the nose for we can judge from the resistance to the closing of the loop whether we have seized a bony projection or not.

Unfortunate accidents during this operation can only occasionally happen. Profuse hemorrhage, as has been stated, occurs but very seldom; fainting attacks are only observed in cases of especially sensitive persons; to avoid them one must proceed slowly and gently. It may however happen that one may not be able to cut through a somewhat firmer polyp without employing great force; it is then well to loosen the loop, pull on one end of the wire and so withdraw it. We must then burn through the polyp with a galvano-caustic loop, and a very good idea, according to Voltolini, is to use a steel wire snare which will fit in a galvano-caustic handle; this is generally used as a cold snare and only in exceptional cases brought in connection with the poles of the battery. It is indeed very difficult for a beginner with the direction of the speculum to guide the wire over a polyp; the circumstance

that one only see with one eye causes the dimension of depth to be roughly estimated and often the direction to be lost. However one soon learns to seize the polyp quickly and without causing the patient to sneeze and cough from the irritation of an uncertain touch here and there with the loop. Polyps lying far back may by a strong expiration be moved forward, and so brought nearer to the eye. Other directions about this cannot be given; practice often above all. Placing then the chief advantages of this method together we find them to be especially the simple, non-breakability and cheapness of the instrument, the painless and easy performance of the operation and the possibility of completely removing all polyps and polypoid hypertrophies even in narrow crevices, of course in more than one sitting. Concerning the after-treatment one has first of all to check the hemorrhage, as I have already stated. Further, the places of origin are to be thoroughly cauterized. This is best done by means of the thin galvano-cautery which can be introduced into all narrow crevices. In some degree a substitute is found for this in cauterizing with nitrate of silver or chloride of zinc, which are fused on a thin sound or caustic holder, but still they do not allow so thorough a destruction of the base of the polyp as the red hot iron. If we observe this precaution the danger of recurrence will be much diminished; thus Schaffer, who followed this method, had only 17 cases of recurrence in 102 cases of polyps.

(7) The burning off with the galvano-cautery loop. It was Voltolini who, instead of extraction with the forceps, first called attention to the use of this method; also Michel of Cologne. The application of the loop is of course made under guidance of the speculum. Generally a steel wire loop is chosen for the galvano-cautery instead of the more expensive platinum wire. The great advantage of this procedure consists in the avoidance of hemorrhage; yet, cases of profuse hemorrhage have, in consequence of the operation after this method, been reported by Voltolini and Michel (Michel was once compelled to completely tampon the nose in order to overcome the hemorrhage),and both advise that the loop be slowly and by degrees heated so that it shall not cut through so quickly. It seems that the bleeding behaves the same with the hot wire as with the cold. The introduction and adaptation of the loop is performed exactly as in the before-described method. If we consider that the hot wire scorches the neighborhood and

that every galvano-caustic apparatus is expensive and fragile, we will only employ this method to remove polyps whose pedicle is too hard and unyielding for the cold snare. I must still mention that for polyps which extend into the naso-pharynx, bent snares (as well for the cold as for the hot loops) are used. They are introduced from the mouth into the space behind the soft palate and then pushed upward over the polyps as far as possible, under guidance of the mirror. The already described method of pulling forward the soft palate offers good service.

Another method of placing the loop around such polyps, consists in introducing through the nose a straight snare and opening with the fingers or a bent forceps the loop lying in the naso-pharynx and then pushing it over the polyp. By both methods will even the most skilful operators, on account of the softness and mobility of the mucous polyps, either not at all or only after many attempts succeed; nothing remains then but to take the forceps again as described or, to employ

(8) The galvano-cautery. With a thin pointed galvano-cautery either through the nose or mouth, so many punctures are made in the tumor that it shrinks up; not seldom then after its contraction it may be caught in the loop.

(9) Finally it cannot be left unmentioned that we also split the nose in order to be able then with knife and scissors to extirpate the polyps and at our ease control the bleeding. This procedure can with simple mucous polyps scarcely longer be employed; with sarcomatous and cancerous growths it is, on the contrary, certainly very excellent.

II. Diffuse Hypertrophies of the Mucous Membrane.

These disappear on oft-repeated cauterizing with argentic nitrate. The straight caustic holder of Schroetter here does good service, since it is possible with it to cauterize the entire length of a turbinated bone. One may use a thin sound on the end of which nitrate of silver is fused. The frequent repetition and the headaches, often lasting for hours, which result each time, make this procedure very disagreeable. In more recent times the galvano-cautery is almost universally chosen, and with this the hypertrophied membrane is thoroughly cauterized. The pain lasts only a short time and the effect is prompt.

III. CIRCUMSCRIBED HYPERTROPHIES OF THE MEMBRANE AND PAPILLOMATA.

They are removed with the cold or the galvano-caustic loop; in order to prevent the hemorrhage owing to their vascular wealth they are slowly and by degrees cut through. According to Hopmann and my own observations, I can only affirm that even with these vascular tissues the cold loop, slowly drawn through, causes generally no important hemorrhage and almost no pain; and it is for this reason not inferior to the hot one.

IV. ADENOID VEGETATIONS

in the naso-pharynx are operated upon after various methods. One of the simplest and best consists in introducing a cold loop through the nose into the naso-pharynx. This is held vertical as long as it remains in the nose; once through (known by the diminished resistance) it is turned horizontal and pressed upwards till stopped by the resistance of the base of the skull. Then the loop is closed and everything it incloses removed. The bleeding is very slight, the pain entirely wanting.

The operation must be often repeated till the pharyngeal mirror shows that all the growths have been cleared away. The galvano-caustic loop is used in the same way.

For growths at the side, lying in Rosenmüller's fossa, which are hard to seize from in front, we employ bent snares introduced through the mouth. (Michel.) We may also crush and tear away the vegetations with the bent naso-pharyngeal forceps (Catti), or, if we make the spoon-shaped ends of the forceps sharp, cut them off (Lowenberg.) Meyer has recommended a ring knife, which is introduced into the pharynx and into which opening the growths are pushed by the finger through the mouth; a kind of "sharp spoon" has also been employed. Finally their destruction has been accomplished by the galvano-cautery introduced from before or behind. On the whole the cold loop may be the most recommended on account of the simplicity and quickness of the operation, which also has for the patient no other unpleasantness than tickling in the nose, while the galvano-caustic loop on account of its heat, can very easily injure the neighboring mucous membrane. For the removal of the last small growths, no longer accessible for the loop, cauterizing with the galvano-cautery or argentic nitrate is employed; the latter is, however, much less efficient. Reproduction need not be feared. Often the resistance

of generally young patients causes great difficulty, indeed occasionally renders every operation impossible.

V. NASO-PHARYNGEAL POLYPS.

These fibromata and fibrosarcomata, which are notorious for their vascularity and unbounded growth fall really in the sphere of the surgeon. The best known methods of operation for these new formations are:

1. The galvano-caustic loop. The greatest difficulty is found in the application of the loop, since the tumors are broad-based. The platinum loop introduced through the nose (a thick wire is chosen so that it is not so easily heated) is pushed with the finger as high as possible over the tumor and then drawn fast and only by degrees brought to a glow and slowly closed. During this manipulation the tumor is steadied by a hook-forceps through the mouth and after cutting through is completely removed by this.

Hemorrhage not seldom follows this operation and pyemia occurs. Generally a portion is left. In order to remove this we make from the mouth with a suitably curved

2. Galvano-cautery many punctures, which however, are often followed by profuse hemorrhage (Schroetter) or,

3. We inject the stump by means of a syringe with a solution of iron (Schroetter) or osmic acid, (Winiwarter) and in this way bring about shrinking or necrosis. On account of this difficulty with the galvano-caustic loop in removing everything, many surgeons have given it up and have

4. Extirpated the tumor with knife and scissors, either after temporary resection of the upper jaw or a separation of the soft palate from the hard to procure space. Should the tumor extend into the side spaces of the jaws, severer measures are necessary. In all cases, however, the recurrence and the extension into the cranial cavity are to be feared.

VI. SARCOMA, CARCINOMA, ENCHONDROMA, OSTEOMA.

These also demand the interference of the surgeon. Their extirpation and the stopping of the resulting hemorrhage often make the greatest demands on his skill. Only in case of very small, commencing tumors of this kind can one with the galvano-cautery by energetic destruction deep in the very origin of the tumor expect a thorough cure. Especially is this effective with the benignant papillary growths or villiform cancer which grow quickly and wear away the near-lying bones (Hopmann.) By any extension, however, we must choose with all these forms of tumor one of the above-indicated energetic methods of operation.

In conclusion, I wish to return my thanks to Dr. Ottoker Chiari and the *Deutsche Allgemeine Medicinische Zeitung*, in which the article first appeared, for permission to translate the monograph.

REPORTS ON PROGRESS.

PROGRESS IN OTOLOGY.

Destruction of Cochlea without Deafness.—The *London Lancet* of January 5, 1885, publishes a letter from its Vienna correspondent, who reports the case of a boy, 14 years old, shown by Professor Gruber at a meeting of the Society of Physicians and Surgeons. The patient had an old otorrhea with polyp. As the facial nerve was paralyzed, the professor "operated boldly" for removal of the growth, and in doing so found the cochlea necrosed. After operation improvement was rapid; the paralysis disappeared, and the lad not only could hear, but distinguish musical notes. This case disapproves the generally accepted idea, that a healthy condition of the cochlea is a *sine qua non* for audition; and that this portion of the inner ear is an analyzer of sound, as taught by Helmholtz.

The Treatment of Affections of the Labyrinth.—Politzer's experience of treatment of the internal ear by means of subcutaneous injections of pilocarpine is not encouraging. In syphilis of the labyrinth fair results were obtained from iodine internally, and from mercurial inunction. In hereditary syphilitic deafness with keratitis parenchymatosa the result of the pilocarpine was unsatisfactory. Only one case out of eight was cured. Pilocarpine was used in twenty-three cases of labyrinthine deafness, the etiology of which was obscure, and of these one was cured. Seven improved and fifteen were unaffected. In five cases of panotitis in which inflammation of the middle ear and labyrinth arose simultaneously, and ended in complete deafness, the pilocarpine treatment had no effect. Nevertheless it should be tried early, as Moos and Wolf both report good results from weak injections. In deafness from cerebro-spinal meningitis the effect of pilocarpine was *nil*, but Jacobson reports a successful use of the remedy in a case

under his care. In ten cases of chronic sclerosis of the middle ear, with labyrinthine symptoms, one case only appeared to derive any benefit from the pilocarpine. Of two cases of perforated membrane and purulent catarrh of the middle ear, there was slight improvement in one case. The author used pilocarpine three or four times in two cases of acute inflammation of the middle ear without perforation, and records rapid improvement in them. A two per cent. solution of muriate of pilocarpine was injected hypodermically into the forearm daily in gradually increasing doses of two, three, four to six drops.

Politzer thinks that pilocarpine acts by removing exudations which might consolidate and form new tissue. The use of a solution of sulphate of atropia (0.03 in water 10.) will quickly stop any salivation, sweating, collapse, or vomiting that may occur. The number of injections varies from six to forty."—*Wiener Med. Blatt.*, Jan. 22, 1885; *Manchester Med. Chronicle*, April, 1885.

On the Occurrence of Tubercle Bacilli in Otorrhea—Nathan examined forty cases of otorrhea, and in twelve found evidence of tubercle bacilli in the pus obtained from the external meatus and middle ear. In eight of these patients there was a general state of good health. In some the lungs were found to be affected with tubercle to a serious extent and in severe form. In one case the lungs were not examined. In three others with positive signs, there were no appearances conclusive of phthisis. In three cases there was caries of the middle ear. In those cases in which a scrofulous fungous joint and bone affection existed tubercle bacilli were only found in very few cases. In those cases where the patients were attacked by pneumonic phthisis the identity of the pathological condition of the middle ear and of the lungs was shown by finding Koch's bacilli in the aural discharge. Another important fact in support of the parasitic nature of the purulent middle ear affections in phthisical patients is the negative result of the examination of the pus in other cases of otorrhea, including three of perforation of Shrapnell's membrane, characterized by purulent suppuration."—*Deutsch. Arch. f. Klin. Med. XXXV.*; *Manchester Med. Chronicle*, April, 1885.

A Case of Papulo-Tubercular Affection of the Drum Membranes in a Subject of Hereditary Syphilis.—O. D. POMEROY reports the following:

The patient, aged 18, gave evidences of constitutional taint. Four months previously had attack of interstitial keratitis, which was yielding under anti-syphilitic treatment. July 18, 1883, his eyes grew worse, the result of a debauch, and he noticed his hearing was bad. On the 23d, inspection of R. Mt. gave a congestion about the short process and handle of malleus, and along line of latter a "whitish looking appearance resembling epidermis, but on att empting to remove it by a bit of cotton was found firmly adherent." The remainder of membrane was dull with no light reflex. Hearing, W. two and a half inches. The L. Mt. gave about same appearance, except the grayish mass on membrane more marked. Hearing, W. four inches. Bone conduction better than on right side. August 2, the infiltrated mass had disappeared fr om R. Mt., leaving it reddened and thickened. Hearing unchanged. In L. Mt. the mass had increased greatly in size, and become n odulated. W. heard only on contact. The record shows the eye remained inflamed during all this time, and patient under specific treatment. The last entry on October 10, gives H. D. R. W. one and a half inches after inflation; on left side watch heard when pressed against ear. Tuning fork heard better by aerial conduction. Bone conduction lowered. Mass still on L. Mt. but smaller. Patient was sent then in country, and on his return, at end of three months, his eyes were much better and Mtt., nearly normal. H. D. R. W. two inches; S. W. contact. Tuning-fork better by aerial conduction. Tinnitus very slight at any time. The writer draws the following conclusions: The tuning-fork points to a labyrinthine invasion in this case, and that the labyrinth, in syphilitic troubles of the middle ear, escapes injury oftener than usually believed. The tumors were in the dermal layer of the Mtt., because the short processes and handles of the malleus could be seen behind the masses. Since there was no ulceration, no softening, no scaly appearance, except the removal at first of epidermis, and in absence of direct literature on the subject, we are justified in making the diagnosis of papulo-tubercular affection of the dermal layer of the membranæ tympani.—*N. Y. Med. Jour.*, April 18, 1885.

Mumps as a Cause of Ear Disease is the title of an interesting article by Dr. F. M. Pierce in the March number of the *Manchester Medical Chronicle*. The writer remarks that for many years past aurists have reported deafness following mumps, and that an

ignorance of aural surgery among general practitioners has made them fail to appreciate the effect of the poison of mumps on the ear, though their opportunity of studying this point is better than that of the specialist. The work of Kramer, published in England in 1863, makes no mention of parotiditis as a cause of deafness, and in the work of Ziemssen nothing is said of this sequela of mumps. The value of the tuning-fork in separating middle from internal ear troubles has stimulated aurists to pay close attention to these cases, and increasing reliable observations are now made.

The author then recites that during a practice of thirteen years he has met with forty cases where the relations between deafness and mumps were clearly traceable, and in about as many more cases where there was good grounds for believing mumps the cause of the ear trouble. This is in striking contrast with the experience of Roosa, of New York, who in the last edition of his text-book, relates that out of 5,000 aural cases in private practice only ten cases of deafness were due to mumps. The fact that aurists in this country and in Germany meet with so few cases leads the writer to conclude that epidemics of mumps must be more frequent in England. Toynbee was one of the first writers to call attention to these cases, and taught the pathology of the disease was a hemorrhage in the labyrinthine cavities. No dissections have verified or disproved this theory of his. The author gives us "four typical cases" which do not differ materially from those reported by others. He states that the tendency of mumps to leave deafness is not confined to children. Roosa believes that sudden deafness is not indicative of metastasis to the labyrinth, but that the latter is often affected by an extension of the inflammation through the fissures of Santorini from parotid gland and auditory canal. The author asks: "How is it that catarrh of middle ear unaccompanied by mumps is rarely a cause of sudden and permanent deafness?" and adds, "Though not proven, yet analogy and the history of these cases of deafness after mumps tend to indicate a metastatic inflammation, and the permanent auditory nerve defect, like the atrophy of the testes and breasts in some cases, warrants a belief in a more organic change there than mere catarrh.

M. D. JONES, M. D.

SURGERY.

Treatment of Carbuncle without Incision.—DR. L. D. BULKLEY read before the Section on Practice of Medicine, Materia Medica and Physiology of the American Medical Association a report of the method of treatment which he has adopted for several years past in cases of carbuncle, and which he has found more satisfactory than any other that he has tried in the following particulars:

It secures a comparatively brief duration of the entire process, a comparatively small amount of pain and comparatively little scarring. It avoids a surgical operation and detention of the patient in bed.

The essential features of the treatment as he summarizes them are:

1. The very careful avoidance of all unnecessary irritation of the inflamed surface, as by friction, pressure, handling, squeezing, etc., both during the early and later stages.

2. The avoidance of all warm and moist applications and dressings, such as poultices, etc., from the first to the last.

3. The avoidance of incision, the entire process of opening and discharge of the pus and slough being left to nature.

4. The avoidance of stimulants, except in cases where absolutely necessary to sustain life and strength.

5. The perfect protection of the inflamed part, from first to last, by means of an ointment (preferably one containing ergot and zinc) thickly spread upon lint and changed as often as comfort and cleanliness require.

[The formula which he gives in the report of a case which forms a part of the paper is the following:

℞ Ext. ergotæ fl., - - - - - - ℥ij.
Zinci oxidi, - - - - - - ℥j.
Ung. aq. rosæ, - - - - - - ℥ij. M.

Where desirable to use a greater proportion of ergot in the ointment the solid may be introduced in lieu of the fluid extract. If warm weather or the heat of the part render this ointment too soft it may be made more firm by using a larger proportion of white wax.

The layer of ointment should be not less than one-third of an inch thick, he says.]

6. The administration from the first of sulphide of calcium in small doses every two hours, great care being taken to secure an active and strong article, that in gelatine-coated pills being the best.

7. The support of the system, not by stimulant food and medicine, but by securing a healthy performance of the functions of the system, with nutritious and healthful food, with fresh air, and every agency which can aid to this end.

8. The remedies required are an occasional laxative, a slight sedative, such as Dover's powder, at times to procure sleep, and a refrigerant and tonic, such as is found in a mixture of sulphate of magnesia, sulphate of iron, and sulphuric acid.—*Jour. of Amer. Med. Assoc.*, May 16, 1885.

Shot-Gun Liniment.—DR. J. A. HERRICK recommends in the *New England Medical Monthly* the following specimen of polypharmacy. He says he has used it for twenty years and has "never seen a combination which was equal to it."

℞	Tr. aconiti rad.,	ʒij.	
	Ol. origani,	ʒj.	
	Aq. ammoniæ,	ʒij.	
	Tr. opii,	ʒj.	
	Tr. capsici,	ʒij.	
	Lin. sapon. co.,	ʒij.	
	Ol. terebinth,	ʒj.	
	Ol. sassafras,	ʒss.	
	Tr. arnicæ,	ʒiss.	M.

DEATH FROM SMALL-POX OF AN ANTIVACCINATOR.—The *British Medical Journal* announces the death from small-pox of one of the most active and energetic opponents of vaccination in the west of England. A brother of this gentleman who had formerly maintained the same views was converted to a belief in the efficiency and value of vaccination by the death of an unvaccinated son and had all the remaining members of family protected.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting—May 21, 1885.—DR. W. M. MCPHEETERS, President, in the Chair.

DISPLACEMENT OF THE ARM IN UTERO AT BIRTH.

Dr. E. C. Gehrung reported a remarkable case. Vid. p. 29.

Dr. McPheeters.—Was any injury done to the perineum?

Dr. Gehrung.—None whatsoever. The arm was replaced; the scapula rotated down, and the arm kept its position as well as the other. The child uses the hand and arm freely. It must have been an accidental intra-uterine dislocation.

Dr. Ford.—Was there any difficulty in the labor; did it progress favorably?

Dr. Gehrung.—It progressed favorably, though slowly; it was a dry labor, and the woman was a primipara twenty-eight years of age, so that we would naturally expect a slow labor,and it was very slow. It began about 2 o'clock in the afternoon, and the child was born at 7 o'clock the next morning. The first labor pains appeared at 2 o'clock in the afternoon, the waters having escaped on the preceding day.

Dr. Briggs.—Was there any evidence of ecchymosis of the muscles after the child was born?

Dr. Gehrung.—No, sir; there was no injury to the child in any way.

Dr. S. G. Moses.—Was the rupture of the membranes and evacuation of the waters very sudden?

Dr. Gehrung.—The escape of amniotic fluid occurred on the afternoon before I was called, but I was told that it was very sudden.

Dr. S. G. Moses.—Might not this be the cause of the child's arm having assumed this position? Supposing the arm to be behind the neck, and the water evacuated suddenly, might not the contracting uterus have rotated the body of the child in such a way as to push the arm back?

Dr. Gehrung.—But it was not displaced from above downward; but, on the contrary, from below upward.

Dr. S. G. Moses.—Supposing it was the uterus acting against the arm and pushing it down, might it not produce such a displacement?

Dr. Gehrung.—Possibly so. That is as good an explanation as we can get at present. I should suppose the arm had gotten somehow behind the body and by change of position and gravitation combined with the contractions of the uterus, was forced into this malposition; the umbilical cord, as was suggested by Dr. Moses, may have been instrumental in producing the accident. The cord might have slipped off as the waters escaped, leaving the position of the arm undisturbed.

Dr. Lemoine.—What led you to search for the arm?

Dr. Gehrung.—I was observing the shoulder presentation, because I made it then a special study. I found the shoulder but no arm to it, only the axilla. Now if the arm had been displaced downward I should have found it in front above the shoulder, but being displaced upwards I found the axilla, but the arm was absent, which made me suppose that the arm had been amputated; of course, I searched until I found what had become of the arm.

Dr. Yarnall.—At what stage of the labor did you discover this peculiar condition?

Dr. Gehrung.—Just after the head was extruded. I examined whether the umbilical cord might not be around the neck, and on feeling on the left side of the neck I found it perfectly free; there was no umbilical cord. Then I returned to the observations I was making about the delivery of the shoulders, when I discovered that peculiar condition. The child was ascertained by palpation before and during labor to be in the first position, and on the delivery of the head the left shoulder presented under the arch of the pubes. Of course we would look for the right shoulder to occupy that position. There must have been a rotation at some period from first to the third position; whether that had anything to do with displacement of the arm or whether the displacement of the arm was the cause of this or not I cannot tell.

Dr. Ford.—Was the scapula displaced?

Dr. Gehrung.—The scapula was rotated and the shoulder was displaced downward by that rotation, and thus permitted the arm to be dislocated. I think there was no dislocation of the head of

the humerus from the shoulder joint. The position of the clavicle and the rotation of the scapula prevented the necessity for a dislocation.

Dr. Ford.—What position did the child occupy after it was born?

Dr. Gehrung.—It occupied the third position (R. O. A.) until the completion of labor, when I reduced the arm by passing it downward across the back from right to left.

Dr. Ford.—Did you make many attempt after delivery to replace the arm in position?

Dr. Gehrung.—I tried it but did not succeed; it could not be returned to that position without rough treatment and, of course, I could not run the risk of injuring the child. If it had been a dead fetus I think I could have made the arm resume the position in which I found it.

Dr. Lemoine.—Had there been external abdominal manipulation before the descent of the head?

Dr. Gehrung.—None that I know of, except to study the position, which I never neglect in cases of labor; I want to know the position of the child completely before I touch it. These manipulations could not possibly displace an arm nor a leg.

Dr. Ford.—Was there a true dislocation of the shoulder joint?

Dr. Gehrung.—I doubt it: I think there must have been a stretching of the ligaments; I think it was not a dislocation at all.

Dr. Ford.—You suppose the clavicle must have continued to rest flatly against the walls of the chest?

Dr. Gehrung.—I think the attachments of the clavicle to the sternum were stretched in such a way as to give it the downward and backward inclination; the joint between the clavicle and scapula must have been stretched to its extreme to allow the rotation of the scapula, and then the ligaments of the arm being stretched to extremes allowed the displacement of the arm.

Dr. Ford.—You would not consider the case one of dislocation?

Dr. Gehrung.—I don't consider it one of dislocation.

Dr. S. G. Moses.—After the extraction of the arm it was replaced by manipulation; did it require much manipulation?

Dr. Gehrung.—There was no other manipulation than just a trial to replace it upward; finding this impossible, I straightened the forearm at the elbow and passed it downward over the back, when it easily took its normal position. I could easily have understood

how the arm could have got in that position had it been a breech presentation, but, being a head presentation, I cannot understand the mechanism at all.

Dr. McPheeters.—There was no dislocation of the humerus?

Dr. Gehrung.—I cannot speak absolutely on that point, because I believe there was a slight snapping when the arm was reduced.

Dr. Ford.—I recollect some years ago seeing a little girl pick up a half grown kitten by the fore legs, bringing them together over the back. Both scapulæ were completely inverted so that their external surfaces came into contact with the walls of the thorax. The forelegs projected behind helplessly. I reduced this double dislocation of the scapulæ without difficulty. The cat, it must be remembered, has no clavicle.

Dr. Gehrung.—Cazeaux describes a case of backward dislocation of the arm with rotation of the scapula, and quoting Dugès gives it as a diagnostic symptom that the angle of the scapula was dislocated towards the spine, which is very similar to mine except that mine is a much more complicated position; it is a position which has probably never been observed before, but if observed once it may be observed again, and if any one who observes it again feels as I do about it, he will hesitate about reporting it.

Dr. Ford.—If I understood you, you said the head presented, and you got your fingers around the neck so as to make the diagnosis?

Dr. Gehrung.—The head was born; there was no unusual rotation after the head was born. The rotation was for the birth of the shoulder.

Dr. McPheeters.—Was this long before the shoulders were delivered?

Dr. Gehrung.—But a few minutes. I left the arm there until the shoulders were delivered and showed it to the aunt of the patient. While the balance of the child was born I studied the position, and after the completion of the birth I commenced manipulation to bring the arm back to normal place.

Dr. S. G. Moses.—The shoulders were delivered before you changed the position of the arm?

Dr. Gehrung.—I didn't change it until after the shoulders were born. I waited until the child was born and then changed the position slowly. I was not in a hurry, because I wanted to study it.

RETENTION OF OVUM AFTER DEATH OF FETUS.

Dr. Lemoine.—I will mention a case similar to the one Dr. Gehrung has reported at a previous meeting with regard to long continued pregnancies after the death of the fetus. He mentioned one, if you remember, that existed four years, and when delivered there was no decomposition of the fetus; he showed the specimen. Some weeks ago I delivered a lady of a fetus in which all the evidences existing at the commencement of pregnancy had ceased for four months; she had been pregnant for seven months and no development occurred after about the tenth week In this case there was no decomposition. The health of the lady continued perfect even until the time of her labor, the ovoid mass being delivered intact. This was four months after the death of the fetus. No decomposition had occurred even the umbilical cord was perfect, the development of the fetus being such as we would expect after ten weeks. There was no doubt, either, of the existence of the pregnancy being seven months. I simply mention the case as being somewhat similar to the one reported by Dr. Gehrung at one of our previous meetings. In Dr. Gehrung's case there had been repeated hemorrhages. In this case there was no hemorrhage; in fact there was no symptom indicating any departure from the normal condition.

Dr. Gehrung.—How long had pregnancy existed?

Dr. Lemoine.—Seven months.

Dr. S. G. Moses.—What was the condition of the uterus as to development?

Dr. Lemoine.—It showed the development of a ten weeks' pregnancy.

Dr. Gehrung.—Dr. Lemoine's patient might have had a hemorrhage only once, viz., about the time of the extrusion of the fetus. In my case the patient experienced a hemorrhage as often as an effort to expel the contents of the womb supervened. After each hemorrhage, there was a period of rest. The hemorrhages were repeated during four years in this way.

Dr. Yarnall.—I recollect delivering an afterbirth some years ago in a good state of preservation from a lady who had been delivered and who supposed the afterbirth was delivered at the time the child was born. The afterbirth was in a fair state of preservation when extruded, viz., as long as eleven or twelve months after the delivery of the child.

Dr. Lemoine. — Was there any evidence of septicemia?

Dr. Yarnall.—None at all. The woman had some uneasiness, and had had some uterine trouble. When the child was born it was claimed that the afterbirth was adherent and could not be delived. It looked like a large false conception; the membranes had disappeared.

Dr. McPheeters.—Was she attended by a physician at that time?

Dr. Yarnall.—Yes, sir.

Dr. McPheeters.—And he left the placenta?

Dr. Yarnall.—So the patient stated.

EXTRA-UTERINE PREGNANCY.

Dr. Prewitt.—I had a case lately which will probably be interesting to the Society, although I have not the specimen with me. A woman was sent to me from Illinois with what purported to be an ovarian tumor.I found a tumor situated in the left lumbar region extending across the median line and dipping down near the brim of the pelvis,touching the ribs above near their cartilages,about the eleventh rib pretty well back. Anteriorly there was a resonant area between the tumor and the ribs. The tumor was very hard, and the patient told me she had had it for fifteen years; that lately she had suffered more and had had colicky pains, and was very anxious to have it removed. She told me that Dr. Gregory had seen the tumor several years ago and advised against any operation. I remembered that eight years ago I had seen her when she had been at the hospital under treatment for some periosteal trouble about the tibia, and I had made an incision down to the bone which relieved her. She complained of a great deal of pain and aching in the lumbar region, although she recovered entirely from the periosteal affection. She says that I asked her at this time why she didn't have the tumor removed, but I have no recollection of that. There was not uniform dulness all over the surface of the tumor. I could dip my fingers down below the borders of the tumor and down to the brim of the pelvis. Upon making a digital examination per vaginam I could not feel the tumor. The uterus was of normal size. It was certainly not a uterine tumor: in fact it was not any pelvic tumor, and the question arose whether it could be a tumor of the kidney: if so, it was not any of the ordinary tumors. The woman was forty-five or fifty years of age and we should expect most likely a malignant growth. Evidently this was

not malignant, as it had been of fifteen year's duration: besides there was this lumbar resonance posterior to the tumor far back. There was no unevenness of the surface of the tumor, as is the case when the kidney is the subject of growth of any sort and pushing forward, and yet as I say there was a very peculiar sort of resonance over a portion of the tumor that I didn't exactly understand but not a well defined outline, as I have seen in cases of tumor of the kidney. It was a very hard tumor also, having a somewhat irregular margin, as might be the case if the notched border of the spleen were enlarged, but on the other hand there was resonance down to the ribs and throughout almost its entire extent. There was a point where it did extend under the ribs and I think I could pretty safely exclude any connection with the spleen. The next question was as to whether it was a tumor of the omentum or the mesentery or of some of the structures in the abdomen other than the different viscera. It was movable to a certain extent, but not freely so. It could be pushed a little over, and as I say it felt very firm and was a very solid, hard tumor. I was unable to make a diagnosis, but I told the woman that it was not an ovarian tumor or a uterine tumor; that it was an anomalous tumor of some sort and that the chances were that an operation would kill her; that it was extremely doubtful whether the tumor could be removed. She insisted, however, upon having an operation done. I told her that I could make an exploratory incision, and if I found the tumor removable that I would proceed to remove it, and if not I could close up the opening and allow her to get well or as well probably as she had been before; that there was not a great deal of risk in doing this, although I explained to her that there was some risk even in that, but I warned her that it was extremely doubtful whether the tumor could be removed without sacrificing her life. She persisted in saying that she came here to have it removed and that she wanted it removed.

Dr. McPheeters.—What was the size of the tumor?

Dr. Prewitt.—It extended from the lumbar region beyond the median line nearly to the brim of the pelvis and up to the ribs. I proceeded then to make a laparotomy.

Dr. Ford.—Exploratory?

Dr. Prewitt.—Yes, sir. I made an incision some three or four inches long from a point a little above the umbilicus. I found the omentum overlying the tumor and adherent to it to a certain ex-

tent; this was pushed a little out of the way and I slipped my finger in. I found the tumor very firm, hardened, and flattened. Passing my finger towards the pelvis I found a rather sharp border which was extremely hard and felt like bone. I then moved my fingers around, and the tumor felt as if it might be a dermoid cyst, as I remarked to several gentlemen present, but its other characteristics did not warrant such a conclusion; still I would not say that it might not be a dermoid cyst. I turned the omentum back in such a way that we could see a portion of the surface of the tumor, and I found that I could slip the finger very well under it. From below I could pass my fingers under a sort of broad band beneath the tumor. It was quite a flattened affair. At the lower border I could slip my fingers underneath a broad connection seemingly springing from the spinal column. I could not tell how far it went up, but it was pretty thoroughly blended with the other parts. I examined the surface of the tumor by moving the omentum and I found it a smooth surface which looked like that of bone or cartilage in its smoothness and whiteness. I found the small intestines adherent to the tumor and a portion overlying it, which accounted for the rather peculiar sort of resonance heard. The intestines were so thoroughly blended with it that it was evident it would require a very long tedious dissection to separate them from the tumor, and taking into consideration the seeming origin of the tumor from beneath I concluded that the only thing to be done was to close the opening. So I did not make any further examination of the tumor, being quite as much in the dark as I was before, although it occurred to me that it might be a cartilaginous tumor or a tumor which was becoming ossified. I will say, however, that along the border a little to the right, there was a sort of projection that was movable like a nodule, as if it had grown separately or somewhat as we might possibly find in a cartilaginous tumor. It occurred to me that possibly it was a cartilaginous tumor but it was certainly something remarkable to find a cartilaginous tumor in such a position; it would be a very extraordinary growth indeed, but this was a mere conjecture. The wound healed by first intention, but two of the stitches gave way and she had some vomiting from the effects of the anesthetic, and afterwards continued with a very irritable stomach and some pain. Every now and then her face would writhe in a manner which indicated very considerable

pain. I was greatly at a loss to account for this because she had been indulging in the use of morphine to such an extent that I was obliged to partially withdraw the use of it, and it was possible that part of the trouble might have been due to this partial withdrawal of the usual amount of morphine; still I was at a loss to determine the reason for these colicky pains and the persistent vomiting. She had a little fever, although I do not think the temperature got to be over 101°. There was no tympanites and no evidence of peritonitis to an extent that might imperil her life, as I thought, and I could not account for the condition of things that led to this trouble. Her sick stomach persisted and her strength failed and she died ten days or two weeks after the operation. Her death occurred during my absence in Washington: consequently I did not have an opportunity myself to examine the condition of things, but Dr. Brokaw made the post mortem, and he said there were evidences of peritonitis. There had been some suppuration about the stitches, two of which had broken, having been snapped and given away probably during the efforts at vomiting, but there was extensive peritonitis and he took out the whole mass and also the uterus and ovaries. When I came back from Washington I examined it; it was in alcohol. I found the bones of the skull of a fetus at full term. I could trace the outline of legs and arms and I was very well satisfied that it was an extra-uterine fetation which had gone to full term or about full term unquestionably, but how it got away up in the abdomen I do not know. I will say that in connection with the left ovary there seemed to be a portion of bone, at least what looks like a piece of bone of an arm. I asked Dr. Brokaw if there was any continuous connection between the ovarian growth and the mass above,but the seemed to be in doubt upon the point. It was the adhesion of the tumor to the intestines and the amount of peritonitis and disturbance of the abdominal contents which gave rise to or increased the intestinal obstruction,and the colicky pains which she had were undoubtedly the result of chronic obstruction of the bowels from interference with their peristaltic action. If one had not been misled by the history of the tumor, it was a typical case of chronic obstruction of the bowels as the result of adhesions interfering with the peristaltic action of the intestines. I understood Dr. Brokaw to say there was obstruction and accumulation of fecal matter to some considerable extent, although I had used en-

emata on two or three occasions to clear out the bowels. Obstruction seemed to have been established, after the operation, a limited amount of peritonitis aggravating the obstruction by interfering with the peristaltic action of the bowels. I intend to make a careful examination of the tumor and present it before the Society, and probably it would have been better for me to have waited until that time to have make a report of the case, but as the subject of prolonged gestation, etc., came up, it suggested to me perhaps the members might be interested in a relation of it.

Dr. Scott.—Were there any symptoms of obstruction before the effort at removal?

Dr. Prewitt.—Yes, she had had more or less constipation and colicky pains. In cases of chronic obstruction involving the small intestines the patient does not necessarily have difficulty in getting the bowels moved, because the colon might not be involved, and it is the small intestines which give rise to the colicky pains. After the contents have passed the small intestines there may be no more trouble, and the action may be perfectly normal in every respect. This patient had suffered with a chronic interference with the passage of the contents of the small intestines for years,and she had been accustomed to taking morphine to relieve this pain. I presume the case was one of a tubal pregnancy, the tumor eventually escaped from the pelvis. I passed my finger all around, but the tumor did not seem to be connected with the ovary.

Dr. Scott.—Do you know anything about the early history of the cases.

Dr. Prewitt.—I could find out very little from the patient.

Dr. Gehrung.—Would you have left the tumor had you known its character at the time you made the exploratory incision?

Dr. Prewitt.—I could not have done anything better than what I did had I known the character of the tumor, for I am sure the operation would have killed her; she would never have gotten from the table. It would have required a long dissection to liberate the intestines; indeed such a one would be necessary to separate the intestines from the mesentery itself. As far as I could see there was no sac about the tumor at all; it is simply a large mass adherent to the intestines which had become agglutinated to them. This condition had existed for years, the tumor having derived its subsistence from connections with the soft parts

about it. The bones of the skull which I saw seemed to be those of a fully developed fetus.

Dr. Ford.—It had extensive vascular connections, no doubt?

Dr. Prewitt.—Oh yes; it was very much like an attempt to remove a large portion of the mesentery itself.

Dr. Scott.—You think it is a tubal pregnancy?

Dr. Prewitt.—I think it is.

Dr. Briggs.—But part of the ovary was undergoing cartilaginous transformation?

Dr. Prewitt.—I did not affirm that it was cartilaginous, but only that it looked and felt to me hard and white and smooth like cartilage.

Dr. Gehrung.—Was it adherent to the anterior abdominal wall?

Dr. Prewitt.—No, sir; it was quite free, excepting some slight adhesions which I would have disregarded if the case had been operatable.

Dr. Gehrung.—Such adhesions would indicate that there had been contact with pelvic structures in former times.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, April 21, 1885.

Dr. Dean read a paper reporting a Case of Ligation of the Left Subclavian Artery for Aneurism (Vid. p. 26).

TUBERCULAR SYPHILIDES.

Dr. Grindon reported three cases of tubercular syphilides that present some points of interest, and showed a photograph of one of the cases. The tubercular syphilide is described as a lesion consisting of elevations sometimes globular and sometimes rather flat, deeply seated in the skin, varying in size from that of a split-pea to that of a hazel-nut, being firm to the touch, presenting at first a rather smooth glistening surface and in color varying from a copper tint to dark red, at times presenting a smoky red color such as is seen in other diseases. In distribution it may, in a general way perhaps, be said to be not unlike the distribution of psoriasis, inasmuch as it is found much more frequently on the back and ex-

tensor surfaces, perhaps near the joints; still it also occurs upon the anterior surfaces. The lesions tend to occur sometimes singly and sometimes in groups, and run together, often occurring in circles and concentric forms; these terminate in some cases simply by absorption and in other cases by ulceration. According to Bumstead it generally terminates by simple absorption, cicatrices forming without there being any solution of continuity of the surface at the time. It many cases it ends in ulceration, and the ulceration takes on the general form of syphilitic lesions, being circular, concentric, harsh, sharp, etc., and tends to heal from the periphery. In this case it caused very decided disfiguration. As to the time at which it appears, it is generally what we would class as a tertiary affection coming late, generally between the third and the sixth year, sometimes as late as the eighth or tenth, or even as late as the twentieth year; he himself had a case where it came on at the twenty-fifth year. But it has sometimes an early manifestation, and, according to Bumstead, is malignant, that is to say, treatment does not avail much. It generally appears about the forehead or the back near the scapula, and is sometimes limited to these regions; it sometimes extends, involving almost the entire surface. The following is the report of the three cases:

CASE I.—H. R., æt. 52, presented himself at the St. Louis College Clinic for Skin Diseases. Contracted sore twenty-five years ago, which healed in three weeks. About eighteen years ago and again about five years ago had cutaneous manifestations. There are deep scars indicating former ulceration about forehead and cheeks. At present back of neck and scalp are invaded by an ulcerating, serpiginous, tubercular syphiloderm which has existed, he says, about two and a half years.

CASE II.—Mrs. G., æt. about 30, was kindly referred to me by Dr. Boisliniere, Jr. Has an ulcerating, serpiginous, tubercular, syphiloderm which appeared eighteen months ago on the forehead and foot simultaneously, and spread down from the forehead until it covered the cheeks, upper part of chest and back, shoulders, arms and forearms, thighs and legs. There are forty or fifty large lesions, circular or crescentic in shape, and presenting white, depressed, atrophic, smooth, glistening, sometimes parchment-like centres, with slightly or not at all raised, thickened, violaceous borders. In some places are merely these dark, red or violet patches without white centres. These have all been at one time

the site of open ulcers, but they now only exist below the knee; about midway of each leg, anteriorly and externally is a crescentic border of open ulcers. She can give no account of any manifestation of syphilis prior to the one described.

Case III.—Mrs. W., æt. 21, presented herself at the St. Louis College Clinic with an ulcerating, serpiginous, tubercular, syphiloderm on scalp, face, neck, trunk and extremities. The appearance and distribution of the lesions, which are much like that of the last case, you can see in the photograph handed around. The patches are circular, gyrate, crescentic, etc., and present at their borders a row of tubercles covered with yellowish or greenish adherent crusts. Below the knees, on both legs, are the only open ulcers now to be found. These are horse-shoe or kidney-shaped and constantly extending from their periphery and healing at the centre. There were no manifestations noticed until thirteen months ago, when she began to suffer with osteocopic pains and general malaise. At about the same time the eruption appeared on the forehead and began to invade successive portions of the body, progressing downwards. Had a sore on palate last July, and was bed-ridden most of the time from July to December on account of the severity of the cutaneous lesions.

The last two cases present a striking parallelism, both occurring in married women, presumably infected by their husbands. In both the eruption began on the forehead, as is usual, according to Bumstead and Taylor, with these cases. The principal interest, however, attaches to the absence, in both cases, of any previous manifestations, this being one of the three forms of *Syphilis d'emblée* recognized by Cornil. These precocious syphilides are generally severe. The first case is interesting on account of its lateness. The latest period mentioned by any author is twenty years after the initial lesion. But here, if we are to believe the patient, it appeared twenty-two and a half years after the initial lesion.

Cocaine.

Dr. Bryson said that two weeks ago he was called to see a patient in Illinois, an old gentleman about sixty years of age, with a considerably enlarged prostate gland. He was troubled a good deal with spasm of the neck of the bladder; the passage of even the smallest amount of urine causing spasm. There were hem-

orrhoids present which, however, were not bleeding; there were some old external hemorrhoids also. The patient had used opiates to relieve pain, in opposition to the advice of the attending physician. The patient was very weak and, when the doctor saw him at 9 o'clock, was under the influence of morphine, which had been administered hypodermically at two or three o'clock in the afternoon. The urine was very cloudy and loaded with pus, epithelium and mucus. Indeed the pus seemed to predominate so much that Dr. B. suspected there might be some pyelitis although he found no trouble in the region of the kidney. He recommended the ordinary couchgrass tea and liquor potassæ, and also recommended that the patient be given once a day at least, preferably at 7 o'clock in the evening, an injection of flaxseed tea, and directed that the doctor use a catheter as he was unable to pass an injection by the use of the ordinary syringe. This treatment had been followed until yesterday, when the patient came to the city to be under Dr. B's immediate care. Dr. Bryson said that his experience with injections of the bladder for the purpose of allaying irritation had been entirely at variance with what he had seen reported in the journals, and with the results that he heard reported by the profession in the Society. He thought it would be difficult to recall a single case of acute cystitis, especially with enlarged prostate, inflammation or hypertrophy of the prostate gland, from stricture, tubercular disease, or any other cause in which injections and washing out of the bladder had been of any service. In this case simple warm water had been used with a little carbolic acid and acidulated slightly with nitric acid, by the physician in attendance. He was satisfied it was carefully done on the plan of Sir Henry Thompson, that is, to first empty the bladder with the ordinary eight ounce bulb catheter syringe,an ordinary "velvet eye," Jacque's catheter which seemed to pass with ease. With such a bulb the fluid was injected into the bladder and allowed to run out and repeated frequently in order not to distend the bladder and to cause as little uneasiness as possible. These injections, however, were followed by the greatest amount of tenesmus, especially at night. The introduction of the catheter was done as often as the patient could bear it. Dr. Bryson determined to try the use of cocaine. Having satisfied himself that trouble reached as high up as the sigmoid flexure, which is really the reservoir for the retaining of the feces normally,first,anointing the catheter with a four per cent.oleate

cocaine, he passed it in, and without washing out the bladder at all simply injected about twenty minims of a two per cent solution of cocaine and left it in there. About half an hour later he introduced what is called ordinarily a stomach tube, up to the sigmoid flexure, and then injected a pint or a little more of flaxseed tea. In about twenty minutes he had a large action. There was a mass which had to be broken up before it would pass. It formed a mass as large as an ordinary orange. It had probably remained for some time, most likely in the sigmoid flexure, and doubtless this overloaded condition of the portion of the colon had had much to do with the vesical tenesmus. Before injecting the cocaine into the bladder and urethra he was continually troubled with this violent vesical tenesmus. The cocaine seemed to have relieved that entirely and he had quite a large action of the bowels.

Stated Meeting, May 19, 1885. Dr. Bryson in the Chair.

Rupture of Intestine.

Dr. Carson presented a portion of intestine taken *post-mortem* from a patient who was brought to the Sisters' Hospital some weeks ago, giving the following history. He stated that the day before while cleaning a horse or mule it kicked him in the abdomen just above Poupart's ligament. He suffered considerably from shock. The accident occurred at 10 o'clock in the morning. Dr. Tupper was the only one who made a correct diagnosis, and he insisted upon rupture of the intestine, while the rest held that it was probably a rupture of the bladder. Dr. Carson thought from the history of the case, the lack of inflammation, at least the little distention of the abdomen, and the apparent limitation of the inflammation of the perineum that there could not be an extravasation of fecal matter into the abdominal cavity; that the symptoms would be more decided if such were the case. The patient stated that he had made water an hour or two before the receipt of the injury and that since then he had not made water at all. Efforts had been made to draw it off, and only a few drops came away from the catheter. Upon the *post-mortem* which was made the day after—the patient having died the night after his entrance into the hospital—they found a rupture of the intestines with extravasation of fecal matter into the abdominal cavity. The peritonitis was marked, almost circumscribed, confined to the parts and convolu-

tion of intestines immediately around the opening in the gut and with very little abdominal distension. He had been subject to hernia for many years, which had never given him any trouble. The walls were not torn at all; there was no evidence of injury externally. The rupture was in the small intestine, the lower part. It is remarkable that so little inflammation and shock should have occurred. The suppression of urine was no doubt due to the shock, a very common prominent symptom.

Dr. Bryson asked what led Dr. Tupper to make a diagnosis of rupture of the small intestine and not a rupture of the bladder?

Dr. Tupper answered that the profound shock under which the patient was laboring certainly indicated some grave visceral lesion, and suggested at once either a rupture of the bladder or of the intestine. Had the bladder been ruptured, the break would in all probability have occurred at the point of least resistance, namely, in front where it is uncovered by the peritoneum. Had this occurred there would have been urinary infiltration into the perineum and surrounding tissues. This was not present. Moreover, the patient stated that he had emptied the bladder not long before the accident occurred. It was consequently collapsed and out of harm's way. Therefore, he was induced to believe that the intestine rather than the bladder had suffered rupture.

Exsection of Hip-Joint.

Dr. Curson then read a paper detailing a case. Vid. p. 15. In answer to a question by Dr. Todd, said he cut away about three inches of the trochanter and the upper part of the shaft.

Dr. Mudd said he could only add his testimony as to the propriety of the operation and its necessity by reciting two cases in both of which the operation was justified by the conditions found. One of them was a girl about 13 years of age, who had suffered for a number of years with hip-joint disease. The joint was anchylosed at right angles, perhaps a little more than that; and after the child was almost exhausted by the long-continued suppurative action, an excision was made by the semi-circular flap; the acetabulum itself was ulcerated away and there was a communication between the pocket of pus found around the head of the bone and the inner surface of the ilium. Scraping this out he removed a detached fragment of bone and both trochanters. The patient made a good recovery The second case was a boy æt. 17. The excision was made a month

ago,and in that case,also a piece of bone,representing probably a part of the head, was found resting in the cavity the acetabulum and the head and part of neck was absorbed and represented by a rounded projection not more than a third of an inch long.The trochanters were removed in this case. In neither case was there much disturbance. In both cases the patients commenced to improve immediately after the operation. The suppuration was moderate in both cases. In the last case, as in the first, the acetabulum and the ilium were denuded and roughened, but he found no necrosis of the acetabulum. The operation is a justifiable one, he thinks, because when it is made it is for a condition in which the suppurative process has long continued, and this is occasionally the only way of getting rid of it. The operation for the removal of the dead bone in either of these cases would have been as severe an operation as the removal of the end of the bone itself. In his opinion it had been shown that the results in the removal of an inch and a half or two inches are as good as when the dead bone alone is taken off. It is the experience of most surgeons when operating upon joints that if a portion of the bone is removed irritation, due to the contraction of the muscles of the part, is much less and the conditions for rapid and thorough recovery are better.

Dr. Bryson asked if the operation was done under antiseptic precautions.

Dr. Mudd replied that the latter one was, the first one was not. He thought the result was as good in one as in the other.

Dr. Carson said that his operation was done under the use of bichloride of mercury, and bichloride dressings were applied afterwards. Instead of putting in a drainage tube the part was filled with oakum saturated with balsam of Peru and iodoform. The patient had improved steadily since the operation. The temperature after the operation reached a little over 100°, maybe 102°. This patient had come into the hospital several years ago, and he then thought he could accomplish all and improve his condition by the removal of the necrosed bone only. At that time the head of the trochanter seemed to be sound, and there seemed to be no occasion for its removal. This case would go to prove what is held by some surgeons, that it is necessary to remove the head and neck when they are involved in the disease. Dr. Carson thought the operation certainly a justifiable one.

It is urged by some who are opposed to the operation that these

patients, worn out by hectic fever and discharge, are in no condition to stand an operation and that the result will be a fatal one, if it is attempted. He thought that was not so, for the operation takes away the cause which is wearing the patient out by the continued discharge, and then the patient almost invariably recovers, or at least recovers immediately after the operation.

He believed that shock in rupture of the bladder was almost, if not fully, as great as in rupture of the intestine. Of course we might readily expect to find that portion of the bladder uncovered by peritoneum the part ruptured in those cases; but the recorded cases in which the bladder has been ruptured from violence do not carry out that expectation. On the contrary, the fundus of the bladder, or at least that portion of the bladder covered by peritoneum, is the part that generally ruptures in such cases. In this case there was not any extensive inflammation such as would naturally be expected from a rupture of the intestines or such as we usually find; and, although the patient suffered intensely, there was no local pain above the seat of the injury.

Dr. Bryson confirmed what Dr. Carson had said with reference to the site of the ruptures of the bladder in the majority of cases. He cited the observations of Dr. Yvon, a Russian surgeon, who has collated a large number of cases of rupture of the bladder. Yvon thinks that the most frequent point of rupture is that which had been pointed out by the celebrated anatomist Hyrtl as being the weakest part of the bladder, namely, towards the fundus and posteriorly. He himself thinks the protection afforded by the peritoneum covering the bladder is slight. The main obstacle to rupture is in the muscular coat of the bladder, and it is where this is thinnest that rupture is most likely to take place. Furthermore the condition of fulness or emptiness of the bladder at the time of the accident has a great deal to do in determining whether it will be ruptured or not. If it is found that the bladder is empty or nearly so the chances of its rupture are very slight, unless it is diseased. As it had been stated that the patient had emptied his bladder a short time before the injury, there was little doubt that shock produced the suppression of the urine.

FOREIGN BODIES IN ANTRUM OF HIGHMORE.

Dr. Mulhall presented three foreign bodies which he had removed from the antrum of Highmore of a lady, aged 23, who had been sent to him about four months ago by Dr. Pollak to be ex-

amined on account of a fetid purulent discharge from the right nostril. Having diagnosed the case as one of purulent catarrh of the antrum of the right side, he sent her to a dentist with instruction that the first molar tooth be extracted and a gold tube be made with a clasp which would fit around the first bicuspid so as to keep it in place. She went to the dentist and had the tooth extracted and he bored through the alveolus a proper opening into the antrum and washed out a quantity of fetid pus, but she stated that she did not think she could afford a gold tube. She went home and her husband undertook to make a tube which she could put into the antrum. She at once began to improve and was getting along quite well under the use of carbolic acid or iodine washes. About five or six weeks afterwards she came in one day and said "Doctor, I think I swallowed that tube, or lost it." and said "You do not think it is possible that it can be in the antrum?" He thought not, but urged her again to get the dentist to make a gold tube which could be clasped around the adjacent tooth so that it couldn't slip out. Her husband a second time time undertook to wash her antrum and put in a hard rubber plug to keep the opening patulous to the next washing. Some two months ago she said that the plug disappeared, and asked if it might be in the antrum. The doctor didn't think that it was. She put in another plug and on last Thursday she came and said, "Doctor, now I know that plug went into the antrum, I am perfectly sure of it; because I tried to get it out with a hairpin, and could not succeed, and I went to the dentist and he pushed it into the antrum." After the first six weeks the discharge had not been purulent, but when she got these foreign bodies in, the discharge again became offensive in character. As it was pretty evident that these foreign bodies were in the antrum he concluded to operate for their removal on Sunday. He persuaded the patient not to take chloroform, recognizing the fact that there would probably be a good deal of blood which would be apt to get into her throat, and besides he wanted the lady sitting up so as to get as good light as possible. The second molar had been removed and so had the second bicuspid. First separating the cheek from the jaw bone as much as possible, avoiding the infra-orbital artery and cutting back as far as he could where the wall of the antrum, is thinnest and where there is most space to see into the cavity, he made, with a chisel, an incision about an inch long into the antrum above the alveolus and then at right angles far back.

His idea was to take out a plate of bone so that he could put it back afterwards, but it broke in four or five small fragments which he removed. He then had an opening about as large as the thumb. Introducing a pair of forceps he succeeded after some difficulty in removing a hard rubber plug. She said, "Now I know there are two more there because that is the first one I put in." The doctor was able to see another one which he removed with the forceps. Searching around quite a long time he finally found a dark object that he grasped in the forceps and finally succeeded in getting out. On the following day—yesterday, she had a little fever. Dr. M. introduced a drainage tube because he proposed to treat the cavity through the opening he had made. The other opening from the first molar had healed up. As soon as she recovers he would withdraw the drainage tube and allow the cheek to close the opening.

HIP-JOINT DISEASE.

Dr. Todd described a marked case of hip-joint disease discovered in the dissecting room, and asked for an explanation of its nature. The upper part of the capsular ligament was greatly thickened and blended with the muscles and tendons in its vicinity. There was no head to the femur, only the rounded stump of the neck which was covered with periosteum and played against the thickened capsule. The acetabulum was entirely filled with fibrous substance and exhibited rather a convexity than a concavity. The other hip-joint was normal, also the shoulder joints; there was no indication of rheumatism. The body was that of a negro, probably 40 or 45 years of age. The same body exhibited a singular anomaly of both brachial biceps muscles. On both sides the tendon of the long head of the biceps, divided into two slips; in the one case to be solidly attached at the bottom of the bicipital groove well up towards the joint, in the other the slip became blended with the capsular ligament.

Dr. Mudd thought that in those patients who have had inflammation about the hip-joint the inflammatory action results in the absorption of the head of the bone and in partial absorption of the neck so that the leg becomes shortened without anchylosis. There is no question but what some cases of hip-joint disease run a course of somewhat chronic inflammatory action which causes absorption instead of ulceration of the bone.

Dr. Carson asked if in those cases we would find a fibrous development taking place or simply absorption of the neck or that portion that may be left filling up the cavity.

Dr. Mudd said the dislocation or absorption of the head of the bones results in the filling of the cavity of the acetabulum with fibrous material.

Dr. Steele said that possibly there might have been a diastasis of the epiphyseal head of the femur in early life which failing to unite had resulted in absorption. While the round ligament would remain the nutriment conveyed through that would not be sufficient to maintain its vitality and the separated portion would be absorbed. At the late meeting of the State Medical Association at St. Joseph a physician consulted him in regard to just such a case in a young child in which, as the result of an accident, there had been a few days previously just such a separation of the epiphyseal head of the femur. Those cases are comparatively rare.

Dr. Mudd asked Dr. Todd how the bone was developed, whether the head was developed with the neck or had a distinct ossific centre of its own? It had an independent centre and unites with the neck at the trochanter did it not?

Dr. Todd.—The trochanters have separate ossific centres, each of them. The neck has a common centre with the shaft.

Dr. Mudd.—I think the head and neck are developed from one centre and that they join with the shaft of the bone at the trochanter; if so, the explanation given by the doctor would not be to the point.[1]

Dr. Steele said that according to his recollection the head alone constituted the upper epiphysis, that the neck was developed as a part of the shaft, and the trochanters from independent centres.

Salivary Calculus.

Dr. Shaw said that some months ago he saw a young man, about 25 or 26 years of age, suffering from melancholia of a very pronounced type. No complaint was made of any physical suffering. After two months of treatment, when he began to convalesce, he said there was something the matter with his mouth. The doctor examined carefully and recognized the presence of a white

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ST. LOUIS, MAY 21, 1885.

1. DR. E. M. NELSON.—Please add foot-note to the report of the Proceedings of the Medico-Chirurgical Society, for May 19, correcting my interpretation of the reading from Wilson's Anatomy concerning the development of the head of the femur. It is developed by a separate ossific centre, and joins the neck which is developed from the shaft. Dr. Steele was correct in his impression.

Very Respectfully, HENRY H. MUDD.

tumor on the left side, on the floor of the mouth. He attempted the removal of this, but failed, though the bistoury struck a hard substance and also came in contact with a very sensitive cord in the mouth so that the gentleman would not allow him to do anything more but went home. To make a long story short, he succeeded three or four days after that in removing this salivary calculus. It was the only one that had occurred in his practice; the only one that he had seen of this size. It was interesting particularly because the question arose in his mind whether or not this calculus was the result or a cause of the condition of the gentleman's mind. He was decidedly insane; it was a pronounced case of melancholia.

Dr. Mudhall asked if he recovered after the calculus was removed?

Dr. Shaw answered that he convalesced before the calculus was removed. He is perfectly well and made a very rapid recovery.

Dr. Wall read a paper on "Pharmacy and Pharceutical Preparations," setting forth the advantages secured by the use of fluid extracts.

MICHIGAN STATE MEDICAL SOCIETY.

The twentieth annual meeting of the Michigan State Medical Society convened at the Opera House at Port Huron, Wednesday morning June 10, at 10:30 A. M. Prof. McLean, of Detroit, the president, called the meeting to order, and Rev. Hastings Bliss offered a brief prayer. Prof. McLean introduced General W. H. Hartsuff, of Port Huron, who made a neat address of welcome. There was quite a number of prominent physicians from abroad, and they were invited to seats on the platform. The executive committee made their annual report, which was discussed and adopted. The programme was very full, and those who were to read papers were requested to make them as brief as possible, in order that all might be heard. Dr. O. B. Campbell, of Ovid, read a very interesting paper on "Migraine," which was discussed by Dr. Smart, of Hudson. Dr Woodward, of Tecumseh, read a paper entitled "Treatment of Fractures." The discussion was led by Dr. DeCamp, of Grand Rapids, and proved very spirited. A telegram was received from the Maine Medical Society, which was then in session, and a telegram of congratulation returned. Dr.

McCann, of Lapeer, read a brief paper entitled "Plaster of Paris in the Treatment of Fractures."

Dr. H. O. Walker, of Detroit, read a very interesting paper on "External Perineal Urethrotomy." Dr. Kimball, of Jackson, opened the discussion. The afternoon session was called to order by President McLean, and Prof. McGraw, of Detroit, read his interesting paper on "The Origin of Cancers and Tumors." He presented two patients, from one of whom he had removed the thyroid gland, and from the other he had removed the left clavicle. The cases were of great interest and drew out quite a discussion. Dr. Lundy, of Detroit, read a paper on "Iritis, and its Relation to Certain General Diseases." Dr. Wm. Brodie, of Detroit, opened the discussion, followed by Dr. Bennett and others.

"The Treatment of Fractures" was opened by Dr. Kingston, of Montreal, at 4 o'clock, and continued for some time; quite a number of the prominent medical gentlemen from abroad engaged in this discussion. The secretary, Dr. Ranney, read letters and telegrams of regrets from a number of members and invited guests.

Dr. Geo. E. Johnson, of Grand Rapids, Chairman of the Committee on Organization, recommended quite a number of important changes, and moved that they be adopted. The paper was ordered printed and laid upon the table until next year.

Dr. Carston, of Detroit, read his paper on "Sterility" and the subject was very ably discussed by Prof. Palmer, of Ann Arbor, Prof. Octerlone, of Louisville, Ky., and others. The evening session was called to order at 8:30 o'clock. Pres. McLean introduced Dr. Morse, of the Ohio State Medical Society, a delegate to this body. Dr. Cook, of Muskegon, was called to the chair and Pres. McLean delivered his address, which was an able effort. Prof. Palmer of Ann Arbor, read an excellent paper on "The Physiological and Therapeutical Action of Alcohol." There was a very large audience present to hear the professor's paper, and the discussion which followed was of great interest. The following medical gentlemen were recommended for membership: Dr. Northup, of Port Huron, Dr. Tibbets, of Linden, Dr. Merritt, of Fort Gratiot, Dr. Wilson, of Port Huron, Dr. Chittok, of Detroit, Dr. Blanchard, of St. Clair, Dr. Taylor, of Loomis, Dr. McLaughlin, of Cass City, Dr. Smith, of Detroit.

The St. Clair Mineral Springs Co., through Dr. Blanchard, extended the hospitality of the Oakland, of St. Clair, and a steam-

boat ride to as many of the members of the Society as wished to enjoy a ride upon the river. Dr. Stockwell, of Port Huron, the first president of the society, was present and warmly congratulated by the older members.

The convention began its work at 9:30 Thursday morning and the papers of Prof. Palmer and Dr. Kimie, of Ypsilanti, were jointly discussed and referred.

Dr. Smart, of Hudson, of the committee on medical legislation, reported a bill to regulate the practice of medicine and surgery, which had been introduced in the Senate by Senator Stephenson. The matter was referred to a committee of five, who reported favorably and asked that the bill be passed.

Dr. Stowell, of Ann Arbor, read his paper entitled "The Microscope in Medicine." Prof. Prescott, of Ann Arbor, also read a paper entitled "Legislation to Require Publication of the Formula of all Proprietary Medicines on the Labels," that the public may take their medicines understandingly. Dr. Smart had discussed this subject quite thoroughly in the suggestions which he offered to the Committee on Legislation. Dr. DeCamp read a paper on "Gems in Medical Practice." It was an excellent paper and full of valuable suggestions.

The following officers were elected for the coming year: President, Dr. E. P. Christian, of Wyandotte. Vice Presidents: Dr. Patterson of Charlotte; Dr. Griswold, of Grand Rapids; Dr. Carston, of Detroit; Dr. Alvord, of Battle Creek. Dr. Ranney holds over as secretary and Dr. Smart as treasurer.

Dr. Smart reported as follows: Receipts for the year, $1,382.10; expenses, $407.33; balance on hand, $974.77.

Dr. Kimie, Ypsilanti, read a paper entitled, "Post Partum Hemorrhage."

Mrs. Kinney, of Port Huron, representing the W.C.T.U., presented Prof. Palmer with an elegant basket of flowers as a token of appreciation of the paper which he had read upon "Alcohol."

Dr. Stockwell read a paper on "Functional Paralysis from Malarial Poison." Dr. Christian, the newly elected president, was introduced and made a brief speech. The thanks of the convention were voted to the executive committee and to the people of Port Huron for their kind attention. Dr. George, of Ann Arbor, read a paper entitled "Abscess of Cerebellum and Complications". Dr. Sullivan, of Ann Arbor, read a paper entitled "Atresia of the Vagina and Loss of the Urethra and Base of the Bladder."

At 4.30 P.M. the society and their invited guests took the steamer Conger for a ride into Lake Huron, and returned to the Oakland House at St. Clair, where a supper had been prepared. The company was entertained by the Glee Club and by Dr. Stockwell, who rendered some delightful songs. Dr. Morse, of Ohio, Dr. Kingston, of Montreal, and Dr. Long, of Louisville, Ky., responded to the toast "Our Guests." Dr. Ward, of Langsburg, read his paper entitled "The Professional Dude." "Our New Members" was responded to by Dr. Frothingham and Dr. White, of Detroit. "Our Ex-Presidents" called out Prof. McLean and Dr. Stockwell. The society adjourned at a late hour.

AMERICAN SURGICAL ASSOCIATION.

The annual session was held April 21, 22, 23 and 24, at Washington, D. C., in the Library of the Army Medical Museum. In his address the president, W. T. Briggs, M. D., of Nashville, paid a fitting tribute to the memory of the late Dr. S. D. Gross, who was largely instrumental in organizing this Association. Dr. Briggs also advocated a more liberal policy as to admission of members.

Dr. David Prince, of Jacksonville, read the first paper, describing "A Device for the Purification of the Air of Rooms Used for Operations".

Dr. John B. Roberts read a paper at the afternoon session of the first day on "The Field and Limitation of the Operative Surgery of the Human Brain", which was discussed by Dr. McGuire, of Richmond, Gunn, of Chicago, Nancrede, of Philadelphia, Peck, of Iowa, Prewitt, of St. Louis, Charles T. Parkes, J. C. Warren, of Boston, Moore, of Rochester, and others, the discussion being adjourned and resumed at the morning session on Wednesday.

Following the conclusion of this discussion papers were read on "Nephrolithotomy" by Dr. A. M. L. Tiffany, of Baltimore, and on "The Healing of Arteries after Ligation", by J. C. Warren, of Boston.

Wednesday afternoon was spent in visiting the Johns Hopkins University, at Baltimore.

Thursday morning was occupied with the election of officers, discussion of papers read the day before and the reading and discussion of Dr. J. W. S. Gouley's paper on "Hypertrophied Prostate and its Treatment".

In the afternoon Dr. Ernst, of Boston, gave a demonstration with microscopic exhibition of the bacilli of various diseases.

Then Dr. N. Senn, of Milwaukee, read a paper entitled "An Experimental and Clinical Study of Air Embolism". Discussion on this paper took place on Friday morning, after which Dr. P. S. Conner, of Cincinnati, read a paper on "The Etiology of Tetanus", Dr. C. T. Parkes, of Chicago, one reporting "A Case of Cholecystomy," Dr. J. E. Mears, of Philadelphia, one on "Phosphorous Necrosis of the Jaws" and also a paper describing "An Apparatus for Rapid Anesthesia".

After brief remarks by the president elect the Association adjourned to meet again in Washington, D. C., on the Wednesday preceding the meeting of the American Medical Association.

The officers elected were as follows: President, Moses Gunn, M. D., Chicago; Vice Presidents, Christopher Johnson, M. D., T. P. Russell, M. D., both of Washington; Secretary, J. R. Weist, M. D., Richmond Ind.; Recorder; J. E. Means, M. D., Philadelphia; Treasurer, J. H. Brinton, M. D., Philadelphia.

THE SOUTH-EAST MISSOURI MEDICAL ASSOCIATION.

The Southeast Missouri Medical Association held its ninth annual meeting in Fredericktown; Mo., on May 5 and 6, 1885. Dr. E. A. Vogt read a paper entitled "Bright's Disease." Dr. C. M. Witmer read a paper on "Multiple Abscess of the Liver", and reported a case. Dr. G. W. Vinyard read notes of a case of abcess of the liver. The abscess was situated in the right lobe and pointed through the lung. Aspiration was performed twice. Patient made a good recovery. Dr. G. W. Farrar, Sr. reported a case of abscess of the liver that also discharged through the lung with a favorable result. Aspiration was not resorted to. Dr. W. H. Pitman read the history of a case of strangulation of the bowels for the relief of which, laparotomy was finally resorted to, which revealed the fact the patient had cancer of the colon: consequently the operation was not successful. Drs. Nifong and Goff brought two patients before the Association, one afflicted with benign tumor in the axilla, the other with malignant disease of the antrum of Highmore.

Counsellors' reports for the counties of Madison, Bollinger, St. François, Iron, Perry and Mississippi were received. Dr. A. J.

McKinney was expelled from the Association by unanimous vote.

The following officers were elected: Dr. W. F. Grinstead, President; Dr. G. W. Farrar, Sr., Vice-President; Dr. G. W. Vinyard, Recording Secretary; Dr. A. W. Chapman, Corresponding Secretary; D. A. E. Simpson, Treasurer.

The Association adjourned to meet in Potosi, Mo., on the first Tuesday in November, 1885.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

CEREBRAL SURGERY—SPECIALISM IN MEDICINE—HARVEY'S LECTURES—VOLUNTEER MEDICAL ASSOCIATION—GLADSTONE.

LONDON June, 1885.

In this letter I propose to deal with the subject of cerebral surgery and the localization of lesions in the brain. There is no subject in which we have so greatly increased our knowledge during recent years, and it is one at the same time as interesting as it is important.

On the 12th of last month Dr. Hughes Bennett and Mr. Godlee brought before the Royal Medical and Chirurgical Society their interesting case of tumor of the brain, the position of the tumor having been diagnosed during life and successfully removed after trephining the skull. This is the first case of the kind recorded. It marks an epoch in medical science and progress, and there is no knowing what great results may accrue from this small beginning. Many operations have been performed on the skull involving interference with the brain substance, such as trephining after depressed fracture, opening abscesses in the brain, etc., but this is the first case recorded in which, without any outward manifestation on the surface of the skull, a physician has been able to diagnose a tumor of the brain and so localize its position that a surgeon could be enabled to trephine, cut into the brain tissue and enucleate an adventitious growth. Unfortunately this particular operation, although successful as far as the object was concerned for which it was performed, ended fatally from one of those at-

tendant sources of danger which are almost inseparable from surgery. Perhaps with greater care and greater attention to details we may reduce the mortality attendant upon cerebral surgery to that low figure which now characterizes ovariotomy. We can all remember the terrible mortality which at one time, and not many years ago, attended operations involving interference with the peritoneum, but they have now become to be ranked among some of the safest and most successful operations in surgery. Dr. Bennett in his paper gave details of the symptoms which led to the diagnosis of tumor of the brain being made, such as vomiting, double optic neuritis, acute pain, increasing and progressive local paresis, occasional convulsions; and then he went on to explain the reasons which led to the locality of the tumor being so definitely determined; first from the clinical observations recorded by Dr. Hughlings Jackson and then from the localization of the motor areas of the brain which had been determined by the experiments of Dr. Ferrier, the tumor was diagnosed as being situated in the upper part of the ascending parietal convolution. The skull was trephined over this spot and a gliomatous tumor removed. The patient immediately after the operation showed evidence of relief, and progressed satisfactorily for some time, but ultimately succumbed at the end of four weeks from suppurative meningitis which spread over the surface of the brain and was due to some septic matter having gained access at the seat of the wound. There was also hernia cerebri.

A discussion followed the reading of the paper and resulted in a general consensus of opinion that such operations on the brain are justifiable and that a brilliant future awaited cerebral surgery. The brain itself is not a very vital part and is capable of bearing severe operations.

Prof. Mac Ewen, of Glasgow, who had come up to London by invitation especially to be present at the discussion of this paper gave details more or less complete of seventeen cases of operations on the brain which had been performed by him, of which fourteen had been successful, these were carried out under the most scrupulous antiseptic precautions. In those cases where antiseptics were not used hernia cerebri occurred. It was shown by many of the subsequent speakers that hernia cerebri is an evidence of septic matter having entered the wound, a cause little recognized or suspected by our surgeons of a former generation.

Dr. Ferrier found that operations upon the brains of monkeys gave the same results as those on man; when performed non-antiseptically they resulted in suppurative meningitis and the death of the animals, but when antiseptics were used the animals recovered. Prof. Horsley pointed out that many operations performed non-antiseptically in cases of fracture of the skull were successful because adhesions had taken place between the meninges and the sound parts of the skull around the fracture and thereby arrested the spread of the suppuration.

Several of Prof. Mac Ewen's operations were performed for opening abscesses in the brain. In most of his cases the pieces of bone removed by the trephine were replanted; the hemorrhage was stopped by the application of the galvano-cautery; a decalcified chicken bone was inserted into the wound for the purpose of drainage, and the whole covered with antiseptic dressing. At the end of a fortnight it was generally found that the wound had healed, the pieces of bone replanted had retained their vitality and had helped to fill up the hole in the skull, and the chicken bone had become entirely absorbed. Prof. Horsley gave a very practical hint which he had found most useful in operations on monkeys for reducing the amount of hemorrhage, often very troublesome in operations on the brain. He found that the injection of two-thirds of a grain of morphia before the operation contracted the cerebral arterioles and reduced the bleeding by one-half, besides lessening the amount of chloroform necessary for anesthetizing the animals.

The '*Fortnightly Review*' for this month contains an article on Specialism in Medicine written by Dr. Morell Mackenzie who is the great authority in this country on diseases of the throat. The development of specialism has been the growth of recent years and has not, as a rule been very favorably viewed by the great bulk of the profession. But the range of medicine and surgery is now so great that it has become almost beyond the limit of one human mind to grasp inclusively all the knowledge attainable on every individual point, and it has become more and more the habit of physicians and surgeons to concentrate their powers on the study and treatment of the diseases of one or two special and limited parts of the body. This division of labor is only the outcome of a natural law which is influencing every department of life and is really the truest economy. In medicine it is not as supposed, a pe-

culiar feature of modern progress, for Herodotus mentions that all the doctors of ancient Egypt were specialists, confining themselves each to some small branch of the medical art. But in America we are told that specialism has reached its fullest development.

Dr. Morell Mackenzie mentions with admiration a town in the States of 150,000 inhabitants possessing thirteen specialists in his own line of practice. The wonder is how people managed to get on at all with their throats in the last generation, if a town of the second rank now requires and can support thirteen throat doctors. But however strong in the ranks of the profession the prejudice may be against specialists, every consultant now-a-days tries to identify himself with some particular disease or branch of practice either by writing upon the subject, or attaching himself to some special hospital. The 'pure' physician and the 'pure' surgeon, run a chance of being extinguished altogether. The general practitioner when anxious for a second opinion takes his patient to a consultant who has made the disease for which relief is sought a special study. The general hospitals are slowly moving with the stream, and are one after another establishing and organizing special departments. These are generally entrusted to the care of some particular member of the staff. This division into special departments is not altogether unattended with inconvenience, especially to the patients who are sometimes transferred from one department to another until the medical gentleman is found who considers the case within his province and who will undertake the treatment. For instance, a patient applies at a hospital among the crowd of applicants at nine o'clock in the morning, under the impression, that he must have injured his shoulder as he suffers pain and cannot move or raise his arm as formerly. He is at once, from the particulars he gives of his case, transferred to the out-patient surgeon who attends at eleven o'clock. The surgeon examines his arm, finds no evidence of any accident; and he is transferred to the out-patient physician as a possible case of rheumatism. The physician examines him and finds there is loss of power and perhaps some slight wasting of the deltoid muscle: he is then again transferred to the physician who has charge of the electrical department to have his muscle tested and, if considered a suitable case, to have his arm treated by galvanism, and the patient ultimately leaves the hospital about four oclock in the afternoon having

lost an entire day's work. Such is the history of many a case that applies for relief at our over-worked out-patient departments. The number of patients is so great that the medical officers are often glad for an excuse to transfer a patient to some colleague having the charge of a specialty.

In 1877 there was rediscovered in the British Museum the manuscript of the original lectures of William Harvey delivered before the Royal College of Physicians in 1616. These lectures contain Harvey's earliest observations on the circulation of the blood, so that this manuscript may be regarded as the most interesting monument of English natural science. The Royal College of physicians has now decided to authorize the publication of the lectures in autotype, together with a printed transcript, and has guaranteed the price of one hundred copies, viz., two hundred guineas. The handwriting is so cramped, the phraseology so curious and the abbreviations so numerous that none but an expert could succeed in understanding them without some interpretation. Dr. Sieveking of St. Mary's Hospital in his Harveian Oration before the College in 1877, gave a description of the little book and exhibited an autotype copy of one of its pages. He said that without the aid of Mr. Bond, the Chief Librarian of the British Museum he would have been able to have understood very little. After much labor Mr. Bond succeeded in interpreting one of the lectures and he has now been able to find a gentleman who is able and willing to transcribe the whole of them. Autotyping is a much more expensive process than ordinary printing, but Messrs. Churchill have undertaken to publish the work as soon as 350 copies are subscribed for. The whole number of copies to be produced will be limited to 500. Dr. Sieveking is one of the committee appointed by the College of Physicians to superintend the reproduction of the lectures. The facts I have mentioned have been gathered from several letters written by him to the British Medical Journal. The subject has excited considerable interest on both side of the Atlantic and also Australia. Dr. Weir Mitchell, of Philadelphia, has already sent the names of ten subscribers. The cost of each copy, including the transcript, and bound, will be two guineas to subscribers, ahd 2 £ 11 s. 6d. after publication. Names of intending subscribers should be sent to Messrs. Churchhill, 11 New Burlington Street, London, W. or to Dr. Sieveking, 17, Manchester Square, London, W.

For sometime past a body of medical men calling itself the

"Volunteer Medical Association" has been at work organizing a medical staff corps for the volunteer army. The efforts of this body have so far succeeded that the formation of the corps has been sanctioned by the government and a grant of £400 towards its expenses is included in this year's estimates. Four bearer companies, composed of medical students from eight of the London hospitals and about one hundred non-medicals, numbering in all four hundred men, have been formed and trained. Of these, two companies took a creditable part in the last Easter-Monday review at Brighton, and at the march-past were addressed and complimented by Field Marshal, the Duke of Cambridge. The Volunteer army was pronounced as unfit to take the field from want of transport and ambulance. It was the duty of medical men to remove this stigma as far as the ambulance was concerned. It may now be confidently asserted that a nucleus has been formed by which trained bearer companies can be supplied to the volunteer army; and it is to be hoped that they will aid the military branch of the volunteers which has done its duty in training and rendering ing efficient over 800,000 men. Never has the prospect of active service for volunteers been so within measurable distance as at present. With Russia in arms at the gates of India, the possibility (unless conscription is resorted to) of the volunteers being called upon, must for years to come be an ever-present factor. Under these circumstances it is no idle word to say that it it essential to hasten the development of a branch of the service which will provide men, and especially young medical men, trained in the knowledge of ambulance work, and fit to undertake the special duties devolving on medical men in the field. In the event of a great war we do not want to see a repetition of untrained dressers being sent to the front, as happened during the Crimean war; but we want in time of peace to prepare surgeons, dressers and bearers, specially trained in the difficult duties required to be performed in time of war. This can only be done after months of systematic drill and training, and it is to this end that an attempt is now being made to develop for the volunteer army what the medical staff corps is for the regular army; and not only so, but to be an efficient reserve for the medical staff corps of the regular army itself.

The medical profession has lost a good friend in the retirement of Mr. Gladstone from power by the overthrow of his ministry. Never before have honors been conferred with such profusion on doctors as during the last four or five years. As recently as June 6, the day appointed to be kept as the Queen's birthday, Dr. Peter Eade, of Norwich, received the honor of knighthood. But, in other affairs, such an incompetent administration as has recently been driven from office, has never had in its keeping the destinies of a great nation.

E. V. A.

COMMUNICATIONS.

CHOLERA MICROBES.

Sedalia, Mo., May 27, 1885.

Editor Courier.—In reviewing the cause and treatment of Asiatic cholera, would it not be well for us to keep in sight this motor paralysis as an important factor in the cause of this malady. It is possible to my mind that the germ theory may come in as the *effect* and sequence and not as the prime element in cholera infection. As pertinently remarked by Dr. Catlett of St. Joe, "the microbe depends upon the debris of decayed and decaying animal and vegetable matter for its existence, and not upon live tissues."

With this idea in view we certainly ought to look to the *nidus* of the disease-producing element rather than the garbage-feeding bacillus. I merely offer this as a suggestion, and hope that the profession will give the matter the attention it merits, for it is possible that in our crusade against the microbes we may kill the "goose that laid the golden egg." J. W. Trader, M. D.

BLIGHTED OVUM RETAINED SEVEN MONTHS.

Celina, Collin County, Texas.

Editor Courier.—Dr. Gehrung's case of prolonged retention of ovum reported in the May No. of the St. Louis Courier of Medicine, brings to mind a case that may be of interest to some. I was called in a hurry September 18, 1883, to see Mrs. M., a multipara; found her on her back and afraid to move; said she was flooding. On making examination found the vagina filled with clots of blood, the os dilated and a spongy mass presenting. I then gave her fl. ext. ergot ℥j and in a short time the mass was expelled, which proved to be a blighted ovum a little larger than a hen's egg; the fluid only contained a brownish, dreggy sediment

instead of an embryo. History of the case developed the following: She had been regularly unwell for the last seven months, but at that time (seven months past) she had quite a hemorrhage and thought it was a miscarriage, as she had passed one period without menstruating. I think the ovum was then blighted and remained seven months, which made it about the time when gestation should have been completed; the uterus then emptied its contents.

S. B. KIRKPATRICK, M. D.

FOOT, HAND AND CORD PRESENTING—VERSION—DEATH FROM SHOCK.

BRIDGEPORT, ILL., MARCH 13, 1885.

EDITOR COURIER.—I was called to see a Mrs. H. in her seventh confinement at 5 P. M., February 23, 1885. Patient said the water had passed off twenty-four hours previous, and the pains had continued at irregular intervals to the present. Upon vaginal examination, I found the left foot presenting. I then rested easy, presuming I had a footling presentation to deal with. After waiting two hours I made another examination and found the left foot, hand and cord all down in the strait; as the patient had been clamoring for chloroform for some time, I at once sent for Dr. Frazer and requested him to bring chloroform with him. On his arrival, I stated the nature of the case, but he seemed incredulous. Upon examination, however, he verified my diagnosis. He then gave the anesthetic and I proceeded to turn. But the parts being very small, the patient weighing only about ninety pounds, I became exhausted in my efforts to keep the feet down and lift the shoulder out of the strait, and requested Dr. Frazer to relieve me, which he did. And after quite a protracted effort he succeeded in the delivery. The patient was then placed carefully in bed, and after recovering from the effects of the chloroform was put upon full doses of opium and allowed to rest.

On the twenty-fourth, 8 P.M. I found the patient comfortable, temperature 99°, pulse 106; talked cheerfully; took some nourishment; complained of some tenderness over the abdominal region. But little change occurred until about 6 P. M on the morning of

the twenty-seventh, when she showed signs of sinking. In spite of all treatment she sank and died at 2 P. M.

The lochial discharge was free, and therefore I concluded that my patient died from shock and not from inflammation. What is your opinion, Mr. Editor?

This complication is of rare occurrence since it is the first that has appeared in the practice of either Dr. Frazer or myself, and we have each practiced medicine over thirty years.

A. M. MAXWELL.

MALIGNANT PUSTULE.

FRIEDHEIM, CAPE GIRARDEAU COUNTY, MO.

EDITOR COURIER.—In the February No. of the COURIER I find a very well written article on Anthrax, by Dr. Vinke, but with his statement that anthrax in the face is termed malignant pustule I do not agree.

I am of the opinion that malignant pustule, called by the French, charbon, by the people in some parts of Europe, Persian fire, is far more different from anthrax than tubercles from carbuncles.

Dr. Hamilton says in his surgery: "Examples of a more benign pustule are frequently observed, which do not originate from infection and which, while they present many features in common with malignant pustule, differ from it not only in regard to specific origin, but especially in comparative mildness of the symptoms. Nevertheless such cases have by most writers been reported as examples of malignant pustule, but which with much more propriety might be considered as constituting one variety of carbuncle; they occur most often upon the lower lip, but sometimes upon the fingers and toes."

Druitt describes malignant pustule very well. He says, "It commences as a little dark red spot, with a stinging, pricking pain, on which there soon appears a pustule or vesicle seated on a hard, inflamed base; when this is opened, it is found to contain a slough black as charcoal, and this sloughing rapidly spreads, involving skin, cellular tissue and muscles beneath.

The constitutional symptoms and morbid appearances are those of putrid typhus.

Pasteur found in the abscesses of malignant pustule a certain kind of micro-organism, which produced the same disease in healthy animals; these bacilli are found only in such animals who died from murrain, and are generally transferred to men by flies, who fed themselves on the cadavers of such animals, or by handling the hides of them.

Prof. Gross states, that malignant pustule begins as a little circumscribed pimple, and not as a diffused swelling, as in anthrax, and soon forms a large vesicle, raised above the surrounding level and resting upon a hard solid base, which rarely acquires much extent, at least not until the affection has made considerable progress, but rapidly terminating in gangrene.

Where the disease is seated in the face, the swelling is generally so great as to give rise to the most hideous distortion. The eyelids are closed and distended like bladders; the lips are several times their natural thickness and hardly movable; the cheeks are enormously puffed out, and the natural line of demarcation between the jaw and neck is completely obliterated; the face, in fact, looks more like a dark, shapeless mass than a human countenance. As a general rule, it may be stated that few recoveries occur under any circumstances.

I reported a case of malignant pustule in No. 2, Vol. XXXVI of the *St. Louis Med. and Surg. Journal* which happened March, 1878, at St. Louis, in my practice, which answered very well the above description of Prof. Gross, and which had been treated by Dr. Hall and myself. This patient recovered, but gangrene and sloughing did not stop till he took a mixture of bichloride of mercury with iodide of potassium, which remedy has not yet been tried in any other case of malignant pustule, so far as I know.

M. Verneuil has used cauterizations, hypodermic injections of watery solution of iodine, and also tincture of iodine internally, and relates having cured in this manner a young man who already had very grave symptoms. EDWARD ALBERT VOGT, M. D.

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ORIGINAL ARTICLES.

MALARIA IN CHILDREN.

BY J. P. KINGSLEY, M. D., ST. LOUIS.

[*Read before the Missouri State Medical Society, St. Joseph, May* 12, 1885.]

THOUGH much has been contributed to the literature of medicine concerning diseases of children, it is surprising how little attention has been given to that malady which is so general among such patients, namely, malaria. Foreign authors almost ignore the subject, while American writers, especially those of the East, devote but little time to its consideration.

J. Lewis Smith, of New York, in his work on Diseases of Children, treats of this subject in five pages, and concludes the article by recommending quinia in doses of one grain three times a day. Meigs and Pepper in their comprehensive Treatise on Diseases of Children dispose of the subject in less than four pages. They also advise the administration of quinia in dose of one grain three times a day. They state that children at a very early age bear full doses of quinia very well and the amount they found necessary to arrest an attack of intermittent fever in a child one year of age was three grains daily. Steiner treats

of malaria in children in less than two pages, while Day, Hillier and a large number of foreign writers make no mention of it in their works on diseases of children.

From this it will be seen that the inexperienced physician is compelled to acquire his knowledge from experience, or else be led astray by the text-books that treat of the affection as it occurs in adults only.

Malaria in children presents itself in such variable forms as to often baffle the diagnostic powers of the most acute physician. It was said by Schmiedler, and with much truth, that few diseases to which children are subject present themselves in such indefinite, obscure, changeable forms as does malaria.

I will state in advance that my observations have been made chiefly at my clinic for diseases of children at St. John's Hospital and Missouri Medical College Dispensary, where I have treated some three hundred children a year, for this disease alone. While it is true that the same accurate history cannot be gleaned from clinical patients as from private or hospital patients, still we learn sufficient from the parents or guardians to warrant us in making a diagnosis which in the majority of cases is correct, and which affords us sufficient grounds to draw our conclusions. Hence my remarks on malaria in children, though drawn more from clinical than from private practice, will not suffer a particle, but will on the contrary gain strength, from the number of cases that daily come under my observation.

In children over five years, the symptoms of malaria differ but little from the symptoms manifested in the adult: under this age, however, the difference becomes more marked, sometimes increasing as the period of birth approaches. By far the most frequent type in the infant is the quotidian, due, in all probability, to the weak resisting power there is opposed to the poison. That very young infants have attacks of malarial fever is proven without a doubt. I have met such in practice, where the children were from one to three weeks old. Indeed I have had occasion, in a few cases, to witness infants who seemed to suffer from malaria, even from their birth. In these cases, however, the mother had been subject to malaria previous to the birth of her child. I am inclined to think that there is

much truth in the popular belief that infants may nurse the specific poison from their mother.

Possibly the susceptibility of infants who are nursing mothers affected with malaria may be due to the deterioration of their food and to an exposure to the same causes that have produced the disease in the mother.

If it be true that the infant may have malaria at birth, or, as some have supposed, before birth, may not the specific principle enter the mother's milk and thus be communicated to the child that is nursing?

I have already stated that the type of malaria, in children under two years of age is, as a rule, quotidian. A large percentage of the cases under one year I have found to be irregular or obscure. Bohn has reported that one-third of his cases under one year were of an irregular or masked type. It is in consequence of the indefinite, vague and irregular forms of the disease, that a correct diagnosis is attained with so much difficulty. Acute chills are rare in the young child, and the younger the rarer. However, cases have been reported where the mother perceived a tremor every day in the fetus for some time previous to its birth. Be this as it may, I do not dispute it; one thing, however, I maintain with certainty, and that is, that the acute rigor so characteristic of malaria in the adult is but rarely seen in young life. Nothing more is perceived than a general derangement of the system, and this is frequently attributed to teething, catching cold, scrofula, etc. In such cases our diagnosis should be based on the daily recurrence of the symptoms or disturbances. Here, undoubtedly, the closest observation and inquiries are necessary. Many physicians have been annoyed at the continued ill health of infants under their care, despite the prescribed treatment of tonics, alteratives, etc. They have frequently given up all hope and prescribe quinine on general principles, when much to their surprise the symptoms disappear and the child is restored to its former health and vigor.

The malarial cachexia in children manifests itself quite early. Within one or two weeks the child becomes anemic; its previous healthy and rosy complexion gives way to a sallow, grayish or

yellowish color, its lips and mucous membrane become pale and bloodless, and emaciation quickly follows. Soon the spleen becomes enlarged; a fact readily appreciable upon a careful examination.

Indeed an examination of this organ should always be made, as upon this one symptom alone must our diagnosis very often rest. I have frequently prescribed an anti-malarial remedy, solely on account of the enlargement of this organ, there being no other malarial symptom present. There are times when the enlargement is perceptible only in the paroxysmal state and when it is congested. Then also, as Massvreanz states, a systolic murmur can be heard over the spleen, much resembling the uterine souffle of pregnancy. This murmur is due, he says, to the undue distension of the splenic vessels and their alternate contraction and dilatation.

It is well worth remembering that enlargement of the spleen is often upward and backward, and consequently may escape our observation. Where this exists, dulness on percussion may be found as high up as the seventh and even sixth rib. In chronic cases it may not infrequently extend even as low down as the crest of the ilium.

Palpation alone, however, will not always enable us to discover the enlargement of the spleen.

When the malaria assumes a masked type, the pulse becomes small and but little increased in rapidity. Restlessness generally exists, and the child tosses and frets at night, is cross and pettish and, if nursing, eagerly and frequently takes to the breast or bottle. Should there be a chill it is of short duration, existing for a half an hour or more, seldom longer than an hour; in most cases, however, the rigor is not perceptible. Should the child be carefully observed, it will be noticed that the hands and feet become cold at times—that there is a languor and drowsiness, a general feeling of malaise, existing for some days before the physician is summoned in to attend it. The older the child is, the more prominent, of course, these symptoms become. In the more marked cases, the digestive organs are usually impaired and vomiting, as a rule, takes place at the onset of the attack. Food is often vomited unchanged, that had

been taken into the stomach twelve or twenty-four hours previous. Patients are constantly brought to my clinic to be treated for deranged digestion or diarrhea, when malarial poison is the evil that must be combatted.

Children frequently come home from school complaining each day of headache. So continuous become their complaints that they are finally brought to a physician. He, as is often times the case, makes a slight examination and comes to a hasty conclusion. With a shrug and a wink he tells the inquiring parents that nothing serious is the matter with the child; that there is simply a slight derangement, due to close confinement and application to books. A purgative is prescribed and rest advised. With all credit to the therapeutics, though the diagnosis be at fault, the child recovers in a few days. In many cases, a simple purgative will suffice, as it is the tendency of nature to eliminate all poisons. Many cases, it is true, recover without any treatment whatever. That the school-room does exert an influence in causing malaria I have little doubt; indeed my experience and the clinical records I have kept for the last ten years go far to prove that the school-room and its necessary accompaniments help much to producing malaria in children. I find two periods in the year when this disease is most prevalent. First in the fall, when school is resumed and again in the spring, after they have attended all winter. In the fall, a sudden change takes place in their manner of living: after leading a free, lively, romping life during the vacation, they are now confined for several hours each day. Studies now occupy their little brains instead of play and game. There is more or less mental anxiety; they are severely taxed and even in their free hours their childish sports and games are limited by some rule or other.

Moreover being crowded together in rooms, often but poorly ventilated, they are compelled to breathe an air that is impure and hot. As the weather grows cooler this air becomes the more vitiated owing to the greater want of ventilation. The child is, therefore, forced to breathe an atmosphere contaminated with the exhalations arising from the bodies of the pupils filled with small particles of matter, etc.

The second period to which I have alluded, is towards the

termination of the school term, a period when the child becomes exhausted both mentally and physically. True it is that the spring and fall are seasons of the year when malaria most prevails. But, strange to say, I find that the malarial manifestations are not present in children until they begin to attend school. I have observed a large number of cases in which malaria manifested itself only when the child attended school, there being no symptoms or signs of the disease when the child remained from school.

Many cases of chorea and epilepsy have been brought before the clinic which have been apparently induced by malarial poisoning. That such were caused by malaria was well proven by the fact, that all the well known remedies laid down for nervous diseases of such a character absolutely failed, and that only where an antimalarial was administered did the nervous manifestations disappear, to be followed in a short time by the true symptoms of malaria. May we not, therefore, give this as the rationale of the administration of arsenic in many nervous diseases?

Mothers constantly present their children for treatment for what they term a cold. These little patients have as an accompaniment either coryza, bronchitis, laryngitis, pharyngitis, or tonsillitis. I have treated a large number of cases each year for many years, presenting one or more of the above manifestations, coupled with fever. As a rule, these manifestations are the same in the same patient during each attack. When a cough is present it occurs periodically or is intensified periodically. The paroxysms of coughing occur much more frequently and with greater severity during the febrile attack. In such cases the respiration is often found to be 60, 70, or even 80 per minute, becoming normal when the fever subsides.

Acute nephritis has been observed in few cases, though albumen may be frequently found in the urine. Malarial hematuria does not exist in children, except it be the effect of acute nephritis. Spasmodic asthma is another occasional symptom of malaria. Indeed, I am treating just such a case at present, in a child two years of age.

It is important to remember that the chill and sweating stages

are generally absent, or very slight in children under two years of age. All that is noticed in such children, is the febrile disturbance. In children under one year the cold and sweating stages are always absent.

After malaria has existed for a long time hydremia supervenes and edema of the ankles and face may be observed.

In regard to treatment, but a word is necessary. Quinine, one grain three times a day, as prescribed by our eastern friends, will not suffice for our western children. Our babies in the West often times require double and even three times the quantity. Nor does it matter much when the anti-periodic should be administered. It should not be given before the chill, if such should occur, as it might then tend to increase the gastric disturbance and thus not be absorbed. Frequently, owing to the nausea and vomiting, it cannot be administered, and if given will only increase these symptoms. In such cases an enema of the bi-sulphate of quinia will be found highly useful. Five or ten grains of this salt mixed with a teaspoonful of starch water is injected into the bowel each day.

In chronic cases, or cases that are not relieved by quinia, arsenic in the form of Fowler's solution, should be administered. Children bear arsenic very well. A child of five years can with safety take five drops of Fowler's solution three times a day. It is best to administer arsenic after meals. Iron, too, may be administered in combination with arsenic. Another advantageous method of administering quinia when it cannot be borne by the mouth, is by inunction. A quantity is mixed with vaseline, and the ointment is rubbed into the body. The oleate of quinia is preferable; it should be applied thoroughly once a day. Sometimes the compound tincture of iodine, one drop in a little water every two or three hours, has succeeded where other remedies failed. Compound tincture of iodine and carbolic acid, four parts of the former to one of the latter, may be given in the same way. Where medicines have not been well borne, I have had good results from the use of the wet pack.

CONCLUSIONS.

In conclusion I will call especial attention to malaria in children.

The absence of the chill and sweating stage.

The slight periodic fever, which may be detected by the thermometer only.

The frequent or periodic pains in the head or epigastric region.

Indigestion accompanied with nausea, vomiting or diarrhea.

The frequent accompaniment of tonsillitis, pharyngitis or bronchitis.

The periodicity of the coughing spells, which occur most frequently at night.

The necessity of examining the spleen by palpation and percussion and of administering quinine to confirm diagnosis in doubtful cases.

ON TYPHO-MALARIAL FEVER.

BY B. BRIBACH, M. D., SOUTH ST. LOUIS.

[*Read before the St. Louis Medico-Chirurgical Society, June* 16, 1885.]

BY typho-malarial fever I understand the adynamic continued fever, of malarial origin, which runs its course in about twenty-one days, is not influenced or shortened by the administration of quinine, and which has been endemic in this section of the country, with a tendency to increase, during the fall of the last five years or more.

In 1881 the St. Louis Board of Health endeavored to collect statistics about the nature of the disease, by addressing a series of printed questions to the physicians of Saint Louis, leaving the inference, that at that time the disease had been but recently observed in this city. No report has ever been published, to my knowledge, giving the result of these inquiries. [The report was published in the COURIER, February, 1881.—ED.]

The first cases under my observation occurred in the Saint Louis City and Female Hospitals in 1880. Since then I have seen it in yearly increasing frequency, in the southern part of Saint Louis and in Saint Louis county, and these remarks are principally based upon the records of forty-two cases that came under my treatment in 1883 and 1884.

The term "typho-malarial fever" is clearly a misnomer. The disease is not typhoid fever modified by malarial influence; the pathological lesions of typhoid are wanting, however well the typhoid state may be developed. I adhere to the term in deference to the local custom, and for want of a recognized name for this particular type of continued fever.

In its tendency to self-limitation to about twenty-one days when not interfered with and prolonged by active medication, in its resistance to the quinine treatment, and in its favorable prognosis when free from serious complications, the disease presents a distinct type of continued malarial fever which I do not find described in the text-books and other literature at my command. The description of a variety most resembling it is given by Dr. Maury under the head of "malarial continued fever;" and this variety Dr. Sternberg, in his book on malaria, considers non-malarial, and as such excludes it from consideration as not within the scope of his work, mainly on the ground that it cannot be cut short by quinine.

The conclusion that the typho-malarial fever of this city is of malarial, *i. e.*, paludal origin, is in my opinion fully justified by the facts, that it mainly appears in locations where intermittent and other forms of malarial fever prevail; that like these it makes its appearance in the months from July to October, and likewise ceases after the first severe frost of the season. In 1883 we had the first frost on November 12 (26° F.), in 1884 on November 5 (28° F.) No new cases of the disease originated after these dates to my knowledge. Another evidence of its malarial origin rests upon the clinical fact that a number of cases, in the third or the beginning of the fourth week, end in intermittent fever, and may then be as promptly arrested by quinine as in the similar mutation of remittent fever. Woodward, Wood, Morehead, Maury, Bartholow, Sternberg and others have advanced various theories about the nature of this and similar varieties of continued fever. We must assume a second etiological factor to account for the clinical phenomena of typho-malarial fever, but this will probably remain unknown until we shall have a positive knowledge of the nature of malaria itself.

Childhood and early age appear to be more prone to the attacks of the disease than mature age. Of 42 patients 7 were below ten, 18 between ten and twenty, 14 between twenty and thirty, 3 over thirty, none over thirty-eight years old.

Constant prodromata, which precede the onset of the fever for several days, are general lassitude, anorexia, frontal headache, and pain in the epigastrium, back and larger joints; vomiting is common at this stage; epistaxis occurs in many cases.

The fever rises to a temperature of 103° or 104° on the day of the invasion. There is no marked initial chill, although the patient complains of a sensation of alternating cold and heat. During the first and second weeks the temperature keeps nearly uniformly at the same point; the remissions are but slight and do not always occur in the morning. The annexed temperature chart belongs to the record of a patient whom I saw twice daily

We regret that an accident in the office of the engraving company in New York renders it impossible for us, without undue delay, to give here the temperature chart intended for this place. The variations of the temperature are indicated, however, by the following figures:

1885.

September ..	3	4	5	6	7	8	9	10	11	12	13
Morning	.....	100.4	101.5	102.2	102.6	103.5	102.4	102.4	102.5	102.5	101.8
Evening.....	104.2	102.2	103.2	103.4	103.2	104.5	102.8	103.5	103.2	103.8	103.3

September ..	14	15	16	17	18	19	20	21	22	23	24
Morning	101.2	102.3	103.2	101.8	101.1	100.4	99.7	98.4	97.6	98.5	98.5
Evening.....	102.2	104.4	103.8	103.5	102.2	101.8	100.3	.....	.....	.....	.....

during the whole course of the disease. Vomiting and severe pain in the head and epigastrium are the most distressing symptoms. Bronchial catarrh is present in nearly all cases. In the second week the great majority of patients present a well marked typhoid state. Delirium, dry tongue, sordes, subsultus tendinum and dicrotic pulse simulate the condition of the graver disease, and the rare cases, in which diarrhea, iliac gurgling and meteorism occur, are at this period hardly distinguishable from typhoid fever. Constipation and flat abdomen are the rule;

there is no splenic enlargement; the urine often shows traces of albumen.

In the third week the fever gradually abates, and the establishment of convalescence may be confidently looked for about the twenty-first day from the invasion, except in cases that are rendered more tedious by complications, or that have been injudiciously interfered with by active medication.

A number of cases terminate by the substitution of intermittent fever about the same time. The severe symptoms and the febrile temperature have usually entirely abated; there is a chill and high fever followed by complete apyrexia. Of 42 cases 5 terminated in this manner, in which the intermittent was speedily arrested by quinine.

Bronchial catarrh is so frequent a feature of the disease that it can hardly be called a complication. Of other complications and sequelæ there were in 42 cases, 3 of pneumonia, 2 of suppurating parotitis, 1 of abortion, 6 of diarrhea, one of phlegmasia alba dolens, and 1 of cervical cellulitis.

The average duration of the pyretic state is twenty-one days. Of 30 uncomplicated cases defervescence occurred in 3 on the eighteenth, 2 on the nineteenth, 13 on the twenty-first, 8 on the twenty-second, 2 on the twenty-fourth, and in 2 on the twenty-eighth day.

There were two relapses; one in a girl of thirteen, the other in a boy of ten. In both the fever had favorably terminated, the appetite had become voracious, and convalescence was fully established. After a week fever set in again, and in both cases run the course and nearly the time of the original malady. I attributed the relapse in both to overloading of the stomach with indigestible food.

The diagnosis, after the elimination of local inflammatory diseases, rests mainly upon the exclusion of typhoid and of remittent fever. In typhoid, there would probably be a history of more prolonged prodromal symptoms, the temperature does not rise to its maximum on the first day of the invasion, and the abdominal symptoms are wanting in the great majority of typho-malarial fever cases. In those which are complicated by diarrhea, gurgling and tenderness over the cecum,

the diagnosis is for the time difficult or even impossible, and can only be made clear by close examination of the stools, or by the subsequent course of the disease.

The differentiation with remittent fever rests principally upon the quinine test. If the temperature is above 105° the fever is probably remittent; again, the hepatic function is more severely disturbed, there is more icterus and more violent vomiting of bile and mucus in remittent fever. The application of the quinine test is, in my opinion, required and advisable in all cases to complete the diagnosis. If quinine in full doses, *i. e.*, two twenty grain doses on the first, and twenty grains in a single dose on the second and third days, produces a state of complete apyrexia on the third or fourth day, the disease is not typho-malarial fever.

The prognosis is favorable in all cases that are not imperilled by serious complications. There were two deaths in forty-two cases. The first, that of a young man of twenty, was complicated by suppurating parotitis and inflammation of the submaxillary glands. Cellulitis of the cervical fascia set in, and in spite of free drainage and antiseptic treatment the patient rapidly succumbed to septicemia. The other patient, a married woman of twenty-three, showed signs of hypostatic pneumonia the second week, and died in the fourth week.

Convalescence is fairly established with the occurrence of complete defervescence, about the twenty-first day; the appetite becomes almost insatiable, and most patients are restored to health and strength in two or three weeks. Several of my patients enjoyed better and more robust health a month after getting up than they ever did before.

In the treatment, the chief indication is to sustain strength by suitable alimentation and by stimulants. Milk is the principal nutritive agent, and should be given with systematic regularity. I have sometimes found peptonized milk, prepared with Fairchild's extractum pancreatis, to be well borne and assimilated where plain milk was rejected, and from what I have seen of koumiss, I believe that the fermented milk would be a most valuable aliment in the treatment of the disease. Alcoholic stimulants have often disappointed me even in cases where they ap-

peared to be strongly indicated. Vomiting is best controlled by having the patient swallow small pieces of ice, and by counter-irritation to the abdomen. Constipation should be relieved by enemata; laxatives are apt to induce a troublesome diarrhea. Quinine should not be given except, in the beginning, for its diagnostic value; its continued administration in small doses positively aggravates the disease. A large, single antipyretic dose of quinine will temporarily reduce the temperature; so will the salicylates and digitalis, but I have seen no real benefit from these agents in any case, and have discontinued the use of antipyretic drugs altogether in the treatment of this disease, relying on sponging with tepid or cold water, or with dilute alcohol, to relieve the symptoms of hyperpyrexia. The records of a number of cases from hospital and private practice, in 1880 and 1881, which were persistently treated with cinchonidia, quinine, salicylates, eucalyptus and other drugs, have convinced me that all active febrifuge and antipyretic medication tends to interfere with the assimilation of food, to prolong the pyretic state for weeks and to endanger the safety of the patient.

The combination of carbolic acid with iodine (one drop of carbolic acid and three drops of tincture of iodine) which Bartholow recommends in typhoid fever, appears to have been of actual benefit. Mixed with heated simple syrup it forms, after cooling, a colorless, rather agreeable preparation, which in taste, smell and appearance is almost identical with Déclat's Syrup of Phenic Acid. In this form I have given it to the majority of my patients to the exclusion of almost all other drugs. Under its use vomiting often ceased altogether, appetite improved, all the secretions appeared to be favorably influenced, and the temperature often diminished quite markedly. A number of cases, however, in which no drugs whatsoever were given after the diagnosis was made clear, came to an equally favorable termination.

City Hygiene.—The majority of people in our large cities under existing conditions cannot afford to have healthy houses, and the great causes of the excessive mortality and brevity of life in all such cities, are poverty and overcrowding, the latter the result of the former.—*System of Medicine*, p. 186.

CHANGES IN PRACTICE. — MEDICAL PROBLEMS.

BY T. D. WASHBURN, M. D., HILLSBORO, ILL.

[*Address before District Medical Society, Pana, Ill., May* 12, 1885.]

A FEW words on retiring from the chair has become a precedent, which we do not feel at liberty to ignore.

Almost a charter member in the oldest medical society of the state, the "Esculapian" you will indulge me in a word of tribute not only to the society itself, which exhibited wonderful tenacity of life, covering a territory of 150 miles, meeting now in Olney, then Lawrenceville, Mt. Carmel, Palestine, Marshall, Paris and Charleston, the county seats of seven counties, disciplining its members and exerting more power and influence in elevating the profession and commanding respect than some of our state neighbors of modern times, but you will allow me to single out one instance of special merit, one member who was always present, no matter what the distance or the weather; nothing but sickness ever prevented his attendance. We had no railways then, and if streams were impassable, he would take the more time and go around them, such was the resolute and noble pioneer, Dr. Samuel Thompson, of Albion. The first meeting I attended I traveled with him early in the spring over the worst of roads, over fifty miles; in the prime of life, he was as enthusiastic as a boy; keeping copious notes of all his cases, he was as ready to listen to as defend an opinion: he was the encyclopedia we all loved to consult; genial and affable to a fault, of pure English stock; thoroughly read; of ample means, he was a royal entertainer; a true friend, a kind father and devoted husband. I have known him to drive over one hundred miles in a case of consultation. He lived to a good old age, a modest Christian gentleman, and was gathered to the fathers; possibly, like most of the human family, better and more lovingly appreciated after his departure than while in the vigor of active life.

He became a corner-stone in the state organization; and the medical journals bear witness to his varied ability and untiring diligence. With this much personal history, allow me to draw

your attention to some of the changes which have taken place in the last four decades, the limit of my western life, some facts which thrust themselves on our notice and some problems connected with the profession which still remain unsolved.

Drifting from one portion of the United States to another, born in New England, teaching in Georgia, reading medicine in Vermont and Massachusetts, graduating in New York and locating in the heart of the state, Syracuse, threatened with bronchial and laryngeal phthisis, forced to a milder climate, eight years in the Wabash Valley and over a quarter of a century in the central portion of Illinois, three years in service during the civil war and resident of the South two winters since; studying the climate and thrown in contact with some of its best representative men and current literature, I feel somewhat competent to speak of some things pertaining to our profession. Beginning the study of medicine in '39, when Thompsonianism was in full blossom, yet crude, chaotic and densely ignorant, at the same time a genuine reaction against the abuses and traditions of regular medicine, I have seen it grow to become a considerable factor in medical literature and challenge the thoughtful consideration of its competitors and opponents.

When, in the winter of '40 and '41, I attended lectures in Boston, Dr. Wesselhoeft, a German homeopath, was trampling on the old ideas of staid Boston by his fair success in practice, administering microscopic doses of the most inoffensive remedies and patients recovering, of course *attributing* the result to the *remedy*, as honest regulars have done and still do. But Boston was good soil to plant the most extreme vagaries either in religion, medicine or social life; extreme culture, even in science, seems to invite the most absurd and imposing shams. Extremes meet, and from the sublime to the ridiculous is but a step. The law of *similia similibus* was so ethereal, so mythical that it soon found converts, and while negative in its practice and results, it captured wealth and position and has held its grip with remarkable tenacity. Its influence on regular medicine is unquestioned. We sometimes learn more from our enemies than from our friends, and while we might have made the same advancement without the foreign nihilism, we cheerfully concede it has expedited

the result, and given us much material in the solution of problems that sooner or later would have been forced upon us. So much, in passing, as we survey the field, and take account of stock on hand, in regard to all that pertains to regular medicine. Our young men, who have passed only a decade of professional life, little realize what wonderful changes have taken place within forty years, in the pharmacy, the materia-medica, and remedial measures, which have been adopted and now mark the practice of to-day. We will not dwell on the introduction of anesthesia; its application in diagnosis and treatment of some of the most harassing and formidable diseases which we encounter will suggest themselves to you. Veratria in some form has become a substitute for venesection, giving better results more easily controlled and more persistent in its action. Jaborandi and its alkaloid possess powers unlike anything we have ever had in our armamentarium, and seem destined to acquire a reputation and variety of application surpassing any predecessors. Carbolic acid and the carbolates; salicylic acid and the salicylates, bromine and the bromides, coca, iodoform and other agents of comparatively recent introduction, in their own legitimate field have gained signal triumphs and seem destined to hold the fort against all competitors. A score of other *new* remedies are gaining the confidence of the intelligent prescriber, and many *old* ones have been recognized as worthy a place in our list of reliable and efficient agents. Chemistry has made bold strides and contributed its quota of positive results; it has been the hand-maid of the pharmacist in weeding out the crude and disagreeable and presenting the pure, inviting and agreeable. Infusions have been superseded by the more delicate and refined elixirs and extracts, and the old pharmacopeia fairly blushes at the *sweetness* with which she finds herself arrayed, tempting even children to consume her bitter drugs by the tasteless gelatine or saccharine envelope. Chemical combination, therapeutical compatibility and medical genius have been exhausted in meeting the esthetic tastes and imperious demands of an invalid public.

The physician's office no longer resounds to the music of the pestle and mortar, and the compounding of drugs has become

to the physician a lost art. Pathology with its microscopic ingenuity has opened up the very secrets of nature to our view, and nature in its diseased processes has become a marvel and a revelation, furnishing food to the philosopher and scientist as well as giving medicine its clew to the causes, and the remedy essential to its removal. The nervous system, the functions of the cerebrum, cerebellum and medulla oblongata have been explored, defined and elucidated beyond the expectations of the most sanguine; the field is still being worked with grand results; its hidden mysteries are brought to light, and phenomena which were wholly unintelligible have become luminous, and assumed position in our text-books as well-defined elementary principles. Electricity, which was monopolized by the charlatan, has discarded its associations and taken rank among our most efficient agents in the treatment of some of our most formidable complaints; not only of a neuralgic and rheumatic character, but in discussing tumors and arousing sensibility, in profound toxic lethargy and torpor and giving tone and vigor to organic and systemic prostration and debility. Specialists have come to the front and contributed largely to a better knowledge of the organs with which they deal, as well as to more enlightened pathology and correct views of treatment.

But in the advanced literature of our profession, perhaps the most marked change appears. Forty years ago America had scarcely a single text-book she could point to as original and to the manor born; now she counts them by hundreds. Our neighbors over the water have ceased to ask the question: "Who reads an American book?" They not only read them, but reprint and translate them. Our civil war developed such marked ability in surgery and medical practice that we became not only the peers of any nation, but in many things the superiors and the teachers—and to-day the American author is quoted in every department of medicine and surgery, with as much reverence and respect as a fellow of the Royal Society or Nestor of a German University. These are well earned laurels, and a powerful stimulus not only to the diversified editorial talent which we have, but to the vast multitude of intelligent lay-practitioners scattered broadcast over our land.

I hardly dare attempt an analysis of our literature. Aside from the "eclectic" and homeopathic, which in certain lines have achieved a good record and fair success, though its subordinate position too often gives it an acrimonious and pungent flavor, at the same time a more catholic spirit is manifest, and as statistical information is recognized as the basis of reform, we find a gradual convergence to greater unity and less diversity in all the essentials of science.

A single essay has hardly scope enough to convey the peculiar characteristics, the great versatility, the broad culture and charming personality of much of our editorial talent. Journalism, like practice, has thrown itself into subdivisions and specialties. One fearlessly launches its individual enterprise into specific channels and gives you page after page of gynecology and its kindred associates, another leads you into all the vicissitudes and multiform complications of pediatrics; a third worries you with all the grave problems which cluster around the nervous system. Able journals are devoted to the eye and ear—the throat and post-nasal passages, the skin, materia medica, pharmacy, insanity, hygiene, etc. At the same time we have the good old-fashioned medical and surgical journal, the *omnium gatherum*, covering every thing from a pimple to an ovarian tumor, from a *lapsus linguæ* to a *de lunatico inquirendo*. They seem to be spontaneous and are generated like malaria by unseen forces and thrown upon the market to suit the times, from 50 cents to $5, good, bad and indifferent.

Darwin's law of the survival of the fittest comes to the rescue, and every year witnesses some little grave where blasted hopes lie buried; the fond bantling which unfledged genius believed a "long felt want" was no want at all and sinks to oblivion. The position and merits of true journalism is a cause of just pride to the profession. Many are eminently fitted for the chairs they occupy; the wholesome rivalry which exists gives them all the keener edge; the abundance of material ready to their hands, and the unrestrained freedom which they enjoy make them a power which cannot be ignored.

Just now the strangest phenomena, both in journalism and the profession, is not the theories which are held, though vision-

ary and numerous enough, but the practice which prevails. How can a sane man paint or itemize the extreme diversity, the immense variety which even regular practice presents? Select any two men, graduates of the same college, residents of the same village, progressive and well-read, and call them to the same case, and their prescriptions will vary as much as their bill of fare at their respective tables; their diagnosis may be the same, and both aim to meet the same indication, but one will give antimony, morphia and nitrate of potassium, the other aconite, ice and tepid baths; a third would suggest potassium bromide and ipecac or veratria; a fourth decide on calomel and Dover's powder followed with quinine. The result might be the same, but what confusion of remedies!

Again one is found prescribing the most heroic remedies in the most voluminous doses, another the mildest agents in minimum doses; one orders medicine every thirty minutes, another twice or three times a day. Both appeal to the authorities, one pharmacopeia advises a tenth, fiftieth or hundredth of a grain, another five, ten, or fifteen grains of the same for the same disease.

Ringer startles you with his exceptionally minute and attenuated medication, another with his Jackson doses and shot-gun prescriptions. Truly medicine has immense latitude and elasticity; no wonder the amateur and younger practitioner is dazed and bewildered by the apparent incongruity and irreconcilable contradiction. In this labyrinth of paradoxes, we can arrive at but one conclusion, the necessity of having a well-qualified, level-headed man back of the prescription.

In these days of restless progress and wide boundaries of possibilities, fortified by eminent names and diverse views, we are thrown upon our own resources, and the most critical judgment is demanded in managing any given case of organic or functional disease.

Of course this multiplicity of practice has a cause. What is it? The multiplicity of theories and views back of it, gained from the multiplicity of authors, as well as the diverse training and capacity of those who embark in practice.

Does it indicate professional soundness? Yes and no! It in-

dicates growth; it may be healthy or otherwise; at any rate it is better than tread-mill monotony or stereotyped mediocrity.

It is one of the conditions incident to American freedom, multiplicity of resources and Yankee pluck and enterprise; not an evil *per se*, but an amalgam, a mixed evil, which the profession should strive to eliminate and restrain.

Other problems crowd for recognition. Spores, germs, bacteria, bacilli, micrococci *et hoc genus omne* are coming to the front. Antiseptics, antiferments, antipyretics engage both the philosophic theorist and practical microscopist. They influence practice, but their boundaries are not defined, and danger of exceeding their legitimate limits is imminent. Even ordinary catarrh is attributed to some of these vicious micro-organisms, and one will assign their genesis and development in one case to exactly opposite conditions in another, which in logic we should label *reductio ad absurdum*.

The celebrated discovery of Koch in cholera has yielded[1] but little practical result in treatment. Even the necessity of quarantine for the same has become a mooted question.

The medical man must be watchful and wary in regard to these startling announcements of science. He need not embrace or reject, be surprised or disgusted, but patiently wait the provings before abrogating or discarding well-known remedies and well-established modes of treatment. "Prove all things, hold fast that which is good" is as safe in medicine as in morals.

The medical world is greatly influenced by fashion; medical demagogues, not demigods, are as cheeky and vociferous as some of their political brethren, and equally reliable. At one time meddlesome practice is conspicuous, and the *vis medicatrix naturæ* is ignored. This was especially manifest in midwifery and gynecology, and instrumental delivery for a while seemed likely to supersede dame nature's original method. The same is true, to some extent, in much of the medication for diseased conditions; the old routinist and young scientist in self limited disease recklessly disturb nature's restorative efforts and place

1. Since the above was written an article in the *Philadelphia Med. and Surg. Reporter* of April 28 has come under my notice on the subject of cholera which inclines me to modify this remark on Prof. Koch.

their patient in jeopardy, instead of setting him on the high road to health. Other items could be marshaled warning us to be on our guard, never accepting the crude and doubtful until the chaff has been blown out by sharp discussion and scientific demonstration, and we can garner only the plump kernels of wheat, the infallible truth.

Medical science has not yet attained perfection; while it has accumulated a vast storehouse of facts and reached many definite conclusions, it yet has a boundless field of discovery. The future may yet astonish us by the accuracy and development of great scientific truths which the past has been unable satisfactorily to demonstrate. The foundations have been laid; anatomy, physiology, pathology, chemistry, materia medica, therapeutics, midwifery and surgery are the only recognized basis for all practice. In the meantime the superstructure goes up, material has accumulated, the builders are at work. It is grand in its dimensions; if a little mosaic is manifest in certain portions, it need neither destroy the harmony nor mar the design; it is manifest in other liberal professions, why should ours be exempt? In patience possess your souls; it is useless to fight the inevitable; toleration is the crowning virtue of the age, bigotry and shame will have no marble block in this vast edifice. We can all contribute something towards its excellence and stupidity. Let us make it imposing, impregnable and indestructible, able to withstand the shock of ages and the wreck of time.

ILLINOIS STATE BOARD OF HEALTH.—State Sanitary Survey—Sanitary Schedule. The series of blanks issued by the Illinois State Board of Health for the state sanitary survey forms the basis for a more exhaustive report upon the sanitary condition of the state. A report is sought from each city and town with regard to every possible condition affecting the public health. The result will give the most careful sanitary inspection ever made of any state. This is a new proof of the efficiency and energy of the Secretary of the Illinois State Board of Health, to whom the credit is due for arranging the scheme for this survey.

CASES ILLUSTRATING DISEASES AND TREATMENT OF CICATRICES—SCAR—ULCER—EPITHELIOMA. FASTENING OF ARM TO THORAX AFTER BURN.—OPERATION—RECOVERY.

By Frank J. Lutz, M. D., St. Louis, *Surgeon to the Alexian Brothers' Hospital.*

[*Read before the Missouri State Medical Association at St. Joseph, Mo. May* 13, 1885.]

Mr. President and Gentlemen:

ALLOW me to ask your indulgence for the recital of two cases from practice, which have been interesting and instructive to me. Neither is unique or of very rare occurrence; on the contrary they are such as we are liable to meet in our every day's work.

Cicatricial tissue is of low vitality; its improvement and perfecting is but very slowly accomplished. Hence ulcerating cicatrices are not uncommon, nor is it of very rare occurrence to observe in persons of advanced age indolent ulcers upon the site of scars existing since infancy. Not infrequently we encounter well-marked papillary epithelial cancers which have taken the place of the original scar and subsequent ulcer. They are, according to Paget, most frequently seen on the lower extremities and connected with scars *repeatedly* injured. From the superficial tissues the neoplasm invades the deeper structures, the periosteum and the bones, and may endanger life by exhausting hemorrhages and by systemic infection.

Case I.—The specimen which I have the pleasure of exhibiting to you was taken from a patient in whom there occurred a degeneration of a scar into an ulcer and finally into a well-marked epithelioma.

Anamnesis.— H. B., a farmer from the northeastern part of the state, æt. 51, with no hereditary or acquired constitutional vice, sustained a compound, comminuted fracture of the left leg, thirty-three years ago, in the lower third, for which he was treated by the late Dr. Joseph McDowell. In the course of

the reparative process several necrotic pieces of bone were removed. The leg was somewhat deformed, but to all intents and purposes a useful one, and only occasionally gave him trouble, when, on account of some injury to the scar, which indicated the site of the original injury, an ulcer would form over it. Simple remedies and rest usually healed these ulcers. About two years ago he struck his leg, at the place where the scar and subsequent ulcers had been. There was free hemorrhage at the time and afterwards an ulcer formed which gradually grew larger and which bled quite freely.

Status presens.—February 9, 1885. The patient is highly anemic from excessive hemorrhages. The neoplasm encircles the entire leg and extends upwardly to the middle of the leg and downwardly to the ankle-joint and bleeds very freely on removing the dressings or on touching it with a probe or the finger. Its surface exhibits shreds of necrotic tissue and several openings through which the probe touches roughened bone. The ankle-joint is anchylosed. No enlarged glands. The diagnosis of epithelioma was subsequently confirmed by the microscope.

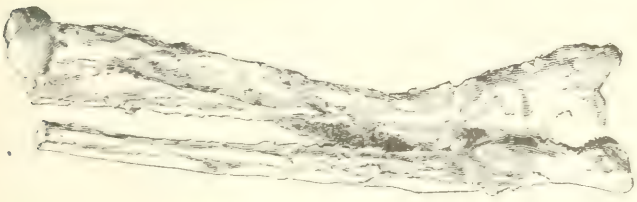

Fig. A.

The leg was amputated February 17, at the junction of the upper and middle third; the wound healed partly by first intention and partly by granulation. His general condition began to improve at once, and he was allowed to return to his home March 29, 1885.

The site of fracture is easily discerned; there is angling and lateral union of the tibia and fibula; part of the anterior sur-

face of the tibia is destroyed and both bones are covered with osteophytes.[1]

The frightful deformities which are sometimes produced by the contraction of extensive cicatrices after burns, come under our notice both for cosmetic purposes and also for the restoration to usefulness of the part involved in the cicatrix.

CASE II.—The photographs to which I desire to direct your attention are those of C. L., æt. 43, who, according to the history kindly furnished me by my friend Dr. Dean, was admitted into the City Hospital about nineteen months prior to his coming under my observation, August 19, 1884. More than one-third of the surface of the trunk and the lateral aspect of the thigh were involved in the burn. Cicatrization aided by skin grafting took place slowly but surely, and when the patient left the City Hospital, nineteen months after admission, the entire burnt surface, except a few ulcerating patches, was covered by a very pliable cicatrix. Unfortunately the arm was fastened to the side for two-thirds of this length, as shown in the picture marked

Fig. B.

B, and was therefore useless to him. He sought relief for this condition.

1. Since writing the above Vol. II of the Transactions of the American Surgical Association has come into my possession, in which Dr. T. F. Prewitt, of St. Louis, records two cases of malignant degeneration of ulcers of the leg. Vide Transactions, etc., p. 491.

Owing to a very exhausting diarrhea from which he had suffered during his illness, his general condition required attention, before the arm was freed from its attachment to the trunk by a free division of the cicatrix and the subjacent tissues. Extension was employed from the very beginning, and so soon as the large wound surfaces began to granulate they were freely covered with grafts to facilitate and accelerate their cicatrization and also to prevent as much as possible the contraction of the new cicatrix, for it is a well-known fact that cicatrices formed from grafts have little tendency to contract and do contract less than the ordinary cicatrix.

Fig. C.

March 31, 1885, the patient was dismissed presenting the appearance shown in the photograph marked C, and having very good use of his arm.

DANIEL'S TEXAS MEDICAL JOURNAL.—The first number of this new journal has come to hand and presents a very attractive appearance. It is handsomely printed on excellent paper. The contents are well prepared and correspond with the brilliant color of the cover; it will doubtless be the most "red" journal in the state. Dr. Daniel must accept our congratulations and compliments upon the very tasty design for the cover.

CASES FROM PRACTICE.

WAS IT HYDROPHOBIA?

By L. A. Merriam, M. D., Omaha, Neb., *Professor of the Principles and Practice of Medicine in the University of Nebraska, College of Medicine, Lincoln, Neb.*

Charles Daley, a bright intelligent Irish lad of about twelve years of age, usually in fair health, but not very strong, of humble parentage, generally poorly clad, badly nourished and often ill treated at home, had lung fever about one year ago, from which he had recovered without any ill results. He was bitten March 23, 1885, by a dog, which he had been teasing, which was not rabid, the subsequent history of which could not be obtained. The wound involved the soft parts on the dorsal side over the left metacarpal phalangeal joint of the index fingers. This was treated by his family and healed rapidly in ten days without difficulty, leaving an irregular cicatrix of about half an inch in length. During the healing red streaks are said to have appeared upon forearm and hand extending from the wound upwards towards the elbow. These passed away in a few days and all seemed well until the last four or five days of April, when the arm is said to have been somewhat swollen and painful, the pains extending to the neck and down the right arm, but no evidence of this remained when the patient was first seen by the attending physician on Monday, May 4. Saturday, May 2, the boy is said to have had difficulty in swallowing both solid food and liquids, and at noon of the same day he had deep sighing respirations on attempting to drink, and these they termed spasms. During the day he lay upon the floor upon a blanket, and from his peculiar actions they thought him "whimsical." When seen by the attending physician on Monday, May 4, he had much dread of fluids with marked hyperesthesia of the

cutaneous surface, widely dilated pupils, and complained of being cold and tired, with prickling sensations in neck and back of head, with frequent urination, constipation and some headache. On Tuesday May 5, at 10 A. M., I first saw the patient. His temperature in the axilla was 99.8° F., pulse 120, and weak, pupils widely dilated, eyes prominent and staring, great hyperesthesia of the cutaneous surface, complaining of a cold wind striking him, frequent urination, with prickling sensations in neck and back of head, deep sighing respirations on attempting to drink water and on blowing upon him, tongue moist, soft and with a white coating, and a few red points on the edges and end of the tongue. His feet and hands were warm, not any headache, no thirst, no appetite and slight confusion of ideas as shown by his answers to questions. Examination of lungs, abdomen and foreskin of penis showed them to be normal. His head was well formed and of extra large size for a boy of his age. The swinging of a hat behind him or blowing upon his head and neck when his eyes or ears could not detect it made little and oftentimes no impression upon him. When a less effort at blowing upon him was made from the foot of the bed where he could see the effort and even the sucking in of the breath when he expected a movement of air caused him to make deep sighing inspirations which several physicians present regarded as spasms of the diaphragm and thoracic muscles, but which to me had no resemblance to any form of convulsion.

At 4 P. M. his temperature was 100.2° F., pulse 130, and weak; pupils dilated, cutaneous hyperesthesia, rambling thoughts and expressions. Pouring water from one tumbler into another with considerable noise had no effect upon him whatever. The pressure of the fingers upon the sides and front of the larynx, before drinking, while drinking, and after drinking showed no abnormal action and an entire absence of laryngeal spasm. The tongue was coated white, soft and not a trace of ptyalism, no swelling of the tongue, no pain, no stiffness of the muscles of the jaws.

At 11 P. M. his temperature was 100.2° F., pulse 140, weak. He asked and answered questions correctly, understood and conversed well, except occasionally, when his thoughts and language were rambling, and at times he was even maniacal. He would lie down and keep still and drink from a tumbler easily when sternly commanded to do so.

At 10 A. M. Wednesday, May 6, his temperature was 99.2° F., pulse 140, and weak. He had difficulty in swallowing fluids, hyperesthesia of the cutaneous surface, dilated pupils, deep sighing respiration easily induced, illusions and hallucinations. The symptoms generally were less pronounced than on the day before except the maniacal symptoms, which were increased. On attempting to swallow the water was thrown from the mouth upon the floor. This was considered to be a pharyngeal spasm.

At 5 P. M. his pulse varied from 140 to 160, and was weak, his temperature 100.2° F., respiration varying from 30 to 35. The general symptoms were about the same as in the morning, a little more quiet and less sighing respirations, he was delirious and maniacal but not very violent; I saw him again at 11 P. M. with two other physicians, and we remained with the patient until 1 A. M. of Thursday. His pulse was 160, weak and variable, violent mania, taking three or more persons to restrain him. The Rev. Father offered him water to drink and he dashed it to the floor, would not drink, would not lie down, but persisted in screaming, swearing and tearing things generally.

Remembering Dr. Hammond's experience with the policeman, I commanded him to lie down and keep still. He said he would not. I told him he would. He replied he could not. I at once realized his submission in changing from "would not" to "could not;" and I said you certainly can and shall, and I gently but firmly pressed him to the bed and sternly commanded him to lie still and keep quiet. He obeyed for a moment or more and then made an attempt to sit up in bed. Without using any force, I tapped him gently on the forehead and commanded him to lie down and be quiet. He obeyed and I had no further trouble with him while I remained. I then procured a glass of water and told him to drink. He said he would not. I told him he should, and I would make him drink it. He said he could not take it. I told him in a stern commanding tone to put down his arms and drink, while I raised his head and held the glass. He looked at me as a maniac would, and saw decision and firmness in my face. He obeyed and drank the first swallow with some difficulty, but when I commanded him in a stern voice to stop such actions and drink easily as other people did, he obeyed and drank without any difficulty the remainder of the glass of water I had offered him.

At 10 A. M. Thursday his pulse varied from 160 to 170, and it

was only by listening over the heart that it could be counted, being barely perceptible at the wrist. His respirations were from 35 to 40; pupils dilated, eyes prominent and glassy, and he drank water without any difficulty whatever.

Mucus had already begun to accumulate in the bronchial tubes as part of the dying phenomena, and he terminated this life at 1 P. M., having never had a convulsion, no rigidity of muscles of the jaw no swollen, painful, dry tongue, no laryngeal spasm, nor any ptyalism. In short the secretions of the mouth were diminished, and he tried to clear his mouth and throat from what he called cotton-spittle. This was never excessive and only once or twice did he spit any out, and this was a white, frothy mucus.

The autopsy was held at 7:30 P. M. Thursday, May 7, in the presence of about thirty physicians.

The organs of the thorax and abdomen were normal except a few adhesions in the right pleural cavity, the result of pneumonia. The brain (encephalon) weighed 55½ ounces, being as is noticed, much above the average adult brain. There were slight abnormal adhesions of the membranes over the surface of the brain and between the convolutions. The meninges were found to be deeply congested and the brain itself also involved.

In the centre of the left occipital lobe was found a softening an inch and a half in length and varying from a half inch to three-fourths of an inch in thickness.

The larynx was found to be normal.

Having given in detail the history and the phenomena of this case I ask: Was this a case of hydrophobia? If you think it was, I trust you will produce the strongest arguments that can be based on the history of the case.

Hydrophobia is held to be a germ disease, the virus existing largely in the saliva, salivary glands and nervous system, and without the presence of this peculiar poison or infecting germs there can be no hydrophobia, whatever may be the phenomena presented or the lesions existing in the nervous system. The recent researches of Pasteur fully sustain this position.

That the case in question was not hydrophobia, and therefore did not come from the virus of rabies, there being no evidence that the dog was, or ever became rabid; that the history and phenomena do not answer the requirements of hydrophobia as given by the latest and best medical writers of the present day, I strongly

hold, notwithstanding the learning and ability of those who believe different from what I do.

In hydrophobia the muscles of the throat, larynx and pharynx refuse to permit anything to pass down the esophagus, and the effort soon becomes spasmodic, and a peculiar sign is present, likened by the laity to the barking of a dog, and this is held by many to be pathognomonic of hydrophobia. This patient never had a laryngeal spasm, as I demonstrated many times by applying the fingers to the larynx when he drank water and other fluids. He never gave that peculiar sound so characteristic of laryngeal spasm.

In hydrophobia the patient is thirsty and wishes to drink, but the moment he attempts to do so, a spasm of the muscles of the throat makes it an impossibility. This patient was not thirsty, and could and did drink easily when sternly commanded to do so. The temperature in hydrophobia is usually 105° F. or above during some stage of the disease. In this patient the temperature was never above 100.2° F. This fact alone is of some value certainly as disproving hydrophobia. In hydrophobia the muscles of the jaw become rigid and general convulsions appear, becoming more severe as the disease progresses.

This patient was a youth of twelve years and like children more liable to convulsions than older persons, yet he never had any rigidity of any muscles, and nothing that simulated a convulsion, and he had more trouble in drinking on Tuesday than on the following days. The excessive secretion of saliva (ptyalism) is accounted a pathognomonic sign in hydrophobia, yet this lad never had any ptyalism nor anything bordering upon it. In hydrophobia the muscles of the pharynx and larynx are usually engorged with blood, the constrictor muscles are a deep red and the vessels in and about the larynx are enlarged, this being the effect of the intense spasmodic and convulsive action present. At the autopsy these organs were found to be in a normal condition. In hydrophobia the general convulsions and the spasm of the larynx are not under the control of the patient, but this lad would lie down and keep quiet and even drink without difficulty when sternly ordered to do so.

But you ask, if it was not hydrophobia what was it? It was a brain disease, and perhaps a nerve disease first beginning in the hand and the degeneration extending to the brain. Such diseases have been termed lysaphobia and are placed by Hammond among

the unclassified neuroses. The very large brain of this lad and his mental endowments indicate a superior development of brain, hence more liable to become diseased under slight influences. Whether his disease began in the brain from abuse, poor living and fright, or whether it was a degenerative process induced in the nervous system from the trauma itself is a question we may never be able to solve. That diseases of a convulsive nature do begin in a peripheral lesion due to the injury itself we have abundant evidence to prove. Tetanus is a disease propagated through the nerve structure, starting from injury of a peripheral nerve and inducing structural changes of nerve centres especially in the spinal cord. Beard and also Hammond give us instances of progressive muscular atrophy caused by wounds of distant peripheral nerves. Hammond gives a case of a lady with a wounded thumb which was the cause of nerve degeneration, resulting in epileptic convulsions, and the history of Chas. Daley is paralleled by several cases given by Hammond in his recent treatise on Diseases of the Nervous System. In none of these cases was there any evidence of hydrophobia, but in all there was evidence of degenerative changes in the brain wrought by the trauma itself. Many of the symptoms of this case are found in various diseases of the nervous system. The frothing at the mouth (which in this case was not worthy of being so called) is seen in epilepsy, mania and several other nervous affections, also the dilated pupils and staring look with prominent eyes are symptoms of mania just before the development of the disease. This case has been carefully, and I believe, correctly stated, and I have given a few reasons why it is not hydrophobia and why it is another nervous disease which recent writers have termed lysaphobia.

It is a question of diagnosis only, not a question of treatment or prophylaxis.

CHICAGO appropriated $100,000 to its Health Department. Of this $12,000 will be expended in completing the house-to-house inspection with an enlarged force of inspectors; $40,000 will be spent in cleaning alleys and the remainder will be held as an emergency fund. The St. Louis Common Council has cut down all the appropriations for work by the Health Department. All the inspection that has been done was paid for from a fund raised by the merchants, and the city has discontinued the street cleaning by machinery and gone back to hand cleaning.

OBSTRUCTION OF THE BOWEL—CANCER OF COLON.

By H. W. Pittmann, M. D.

[*Read before the S. E. Missouri Medical Association*]

On the evening of April 14, I was called to see J. S. B., æt. 33, a school teacher. On my arrival I found him suffering as I supposed from a severe attack of hepatic colic. I gave a hypodermic injection of morphia sulph. gr. $\frac{1}{4}$ to meet the urgency of the case. This was followed by ordinary doses of tr. opii and sulphuric ether every hour until all pain was alleviated. I then gave oleum ricini and magnesia sulph. in full doses to cause an action of the bowels. However, they failed. I next resorted to injections. These too, failed.

Regarding an action of the bowels of vital importance, I gave oleum tiglii gtts. iij: after waiting the due time for the desired effect, I administered the same remedy gtts. v and again failed. After this disappointment I made a thorough exploration of the abdomen. I found in the left and lower portion of the umbilical region a tumor of considerable size. I at once concluded that I had a case of invagination. I called my ex-partner and friend, Dr. C. M. Witmer in consultation. After talking over the case, taking his temperature, which was 100½°, pulse 70, respiration nearly normal, we concluded that an early operation would be advisable, but our patient and his friends seriously objected: therefore, we had to resort to injections of castor-oil, warm water, air, large doses of opium, etc. He continued to grow weaker all the time, had no appetite, tongue coated, soreness over the umbilical region, pulse ranged from 65 to 108, temperature from 99° to 102½°, respiration hurried.

He went on in this way for several days. His friends finally came to the conclusion that without surgical resources death was inevitable. On first of May, I called Drs. A. J. Mayfield, G. M. Carr and J. C. Farrar in consultation. All agreeing that an operation was the last resort, Dr. C. M. Witmer of Marble Hall was called to assist me in the operation. After having imparted our opinions to the patient and his friends, we proceeded to perform laparotomy. An incision was made through the median line, tak-

ing each covering up separately. On opening the peritoneum the bowels, greatly distended with gas, crowded out; after a careful examination of the bowels we found a large cancerous tumor situated in the descending colon about three and a half inches in length and two inches in diameter. We also found several ulcers upon the intestines and for at least two feet above the tumor the bowel had a dark, venous appearance (coat and surface rough etc.). Seeing his condition we concluded to return the bowels and dress the wound in place of performing colotomy. This we did.

The patient survived the operation, the shock, and died of prostration at the expiration of forty-two hours after the operation.

Family would not allow a post mortem.

THE MISSOURI MEDICAL COLLEGE exhibits in its catalogue for the coming session several very important changes in its teaching force. The chair made vacant by the resignation of Prof. Maughs, still absent in Europe, and by the death of Prof. Schenck, has been filled by the election of Dr. G. A. Moses, of St. Louis, as the Professor of Obstetrics and Diseases of Women. Dr. Moses is so well known as an able practitioner and accomplished scholar, that his fitness for this responsible position is at once apparent. The gynecological clinic at the college dispensary also is under the direction of Prof. Moses.

A rearrangement of subjects taught has enabled the Faculty to combine the departments of Physiology and Histology, and to add the cognate study of Pathological Anatomy. The whole chair is filled by Dr. L. Bremer, of St. Louis. Prof. Bremer is also director of the Biological Laboratory, which has been added to the teaching facilities, and which the Faculty intend to develop to an extend commensurate with its growing importance. Prof. Bremer's studies abroad and personal investigations with the microscope specially qualify him for pressing original research that is become so essential for the successful conduct of the department he fills.

SANITARY NOTES.—Two towns in England have adopted the plan of giving sanitary certificates to hotels. If this were done in this country, and travelers gave any heed to the certificates, there would necessarily be a thorough overhauling of our supposed-to-be-first-class public houses.—*The Sanitary News*, July 11, 1885.

EDITORIAL.

CONTAGIOUSNESS OF PULMONARY TUBERCULOSIS IN CHILDREN.

M. Auguste Ollivier read to the French Academy of Medicine at the session of April 28, a brief paper relating two cases which had occurred under his observation, and drawing some conclusions from them. The cases are briefly as follows:

A little boy, twenty-eight months old, whose parents were both strong and healthy, and in whose family connection no trace of scrofula or tuberculosis could be found on most careful investigation, was allowed during the months of November and December, 1884, to spend several hours almost every day playing with a somewhat older child of a neighbor, who was dying of chronic phthisis. Toward the end of January, without apparent cause, the child's health began to fail. He grew pale, had night sweats and perceptibly emaciated. At the same time he lost his appetite and strength.

In the latter part of March, when presented for examination, there was dulness on percussion, and moist râles at the upper part of the right lung; difficult respiration, frequent pulse, moist skin and physical signs of tuberculosis in the second stage.

The second case was that of a little girl, four years old, whose family history was free from all trace of scrofula or tuberculosis. She had been a uniformly robust and healthy child until the commencement of 1884, when she had both measles and whooping-cough, from which, however, she entirely recovered, and her health was good until the end of November, when she had an intense fe-

ver for several days, and then a paralysis of the right lower limb. When brought to the Children's Hospital for treatment of this paralysis, there was, aside from that, no apparent deviation from health.

Under appropriate treatment, including the systematic application of electricity and the administration of strychnia the child gradually recovered from the paralysis. She was in bed for two months at least. Then she was able to be up and to move about some, supporting herself upon her own bed and that of the next little patient. It was three or four weeks more before she was able to walk out into the ward.

This child was placed, on her admission, next to a child, eight and a half years old, in the third stage of phthisis, and who died after five days. It chanced that the same bed was successively occupied by two advanced cases of pulmonary disease, of about the same age, one of whom died after a month, and the other of whom has just succumbed. In each of the three cases there was abundant expectoration.

About the last of March, the child who had been paralyzed, began to lose her spirit, to grow pale, refuse her food and to emaciate little by little. Then there was a little cough recurring quite often, and not accompanied with expectoration. Almost every night she had sweats.

Physical examination detected some dulness, as also prolonged and blowing expiration at the left subspinous fossa and in the right clavicular region.

In both these cases the protracted association with patients in an advanced stage of phthisis, the breathing of air contaminated by bronchial secretions, expectorated or not were probably, in the opinion of M. Ollivier, the real cause of the tuberculization. He notes that children who do not expectorate, or who swallow their sputa, accumulate the infectious agent in the economy and ordinarily show its effects more quickly and more seriously than adults.

He thinks that cases similar to those cited are of more frequent

occurrence than would usually be believed, but are overlooked because attention has not been called to the subject; and that the removal of a child from such contaminating influences might not infrequently result in delaying if not in completely averting this disease.

He concludes from the study of these cases that it would be useful, even necessary:

1. To isolate in families as well as in hospitals all tuberculous children;

2. Not to permit them to stay much with well children, and especially to forbid these to sleep in the same chamber;

3. To secure perfect ventilation of apartments occupied by the little patients;

4. Finally, to cleanse with care bedding, clothing and linen soiled with matters expectorated, and to destroy these with powerful physical or chemical agents in order to prevent their drying in the atmosphere.

RODENT ULCER.

Mr. F. T. Paul, in the *British Medical Journal*, gives us an interesting article on Rodent Ulcer based on the personal observation of twenty-two cases, twenty of them being unmistakable in character. All were located on the face, and all but one above the mouth, thus confirming the English doctrine that this is essentially a disease of the upper part of the face. The one exception was located on the under lip.

The preponderance of cases occurred among men. The average age of patients at the time of appearance of the disease was 50 years.

Recent ulcers are described as small, shallow sores, covered with a scab, and with a "characteristic, pale, raised border of infiltration." Older sores take on the true rodent type, destroying skin, muscle, cartilage, bone, eye, etc., according to its location.

In 1865, Thiersch for the first time investigated and described the histology of this growth. Until then observers had limited themselves to clinical appearances. He classed it as a flat epithelioma, and the many workers who have since explored this field agree with him in the main, but differ among themselves as to the exact dermal tissue which affords its origin. One would refer it to the external root-sheath, another to the sebaceous, another to the sweat-glands. Our author's investigations lead him to regard it as a chronic, rodent epithelioma, equally associated with all the dermal appendages.

In attempting to assign this neoplasm to its proper place, a difficulty is met with in the fact that while its carcinomatous nature is on all sides admitted, it, like scirrhus, is but slightly typical of any epithelial structure; of all carcinomata it shows the least resemblance to normal tissue.

Beginning in the skin, rodent ulcer attacks all the elements of the skin except the lymphatic system, thus affording a marked contrast to all other carcinomata. Its minute structure varies, being sometimes tubular (rare) sometimes acinous and again transitional. Nested cells occur not infrequently, as may be the case wherever proliferation and retention of epidermis is going on.

Cicatrization may for a time occur, but is always shortly followed by renewed activity of epithelial elements.

SINGULAR CONDITION OF DIVERTICULUM OF THE INTESTINE—FATAL OBSTRUCTION OF THE BOWELS.

The Courier has called attention to the fact that the remains of the umbilical duct sometimes persist as a diverticulum from the ileum about three feet above the ileo-cecal valve, and that this diverticulum when of sufficient length may become adherent at its extremity, thus forming a loop into which intestine may fall and become strangulated.

In the *Centralblatt f. Chir.* (No. 1, 1885) a case by Odenius is described in which the diverticulum (about two inches long) had become united at its distal end with the ileum, establishing a new communication, so that the gut seemed to have branched; several loops of gut had been crowded into this trap. Fatal obstruction and peritonitis ensued. It is evident from the records now extant of obstruction of the bowels due to the presence of this diverticulum, that this possibility should be in the mind of the surgeon while seeking for the site after laparotomy; such a surmise might in a given case greatly facilitate the operation.

RADIAL PULSE IN DIAGNOSIS OF ANEURISM OF THE ARCH OF THE AORTA.

At a meeting of the Paris Hospital Medical Society (*Gaz. Heb.*, April 3, 1885) M. Rendu described an aneurism involving the whole aorta from its origin to the first portion of its descending limb, which presented an unusual history. The patient, male, aged 60 years, entered the hospital with double pneumonia, pleurisy on left side with small effusion and a pericarditis; all resulting from taking cold. There was also observed total absence of pulsation in the left carotid and territory of the left subclavian arteries. It was thought that the openings of the two arteries at their point of origin had become obliterated by an atheromatous plaque. Aneurism of the aorta was not suspected from absence of all prominence,of disturbance of pupil and larynx,and of all auscultatory signs; the heart beats were muffled only. At the post-mortem an enormous dilatation of the aorta was discovered, which was subdivided into two cavities by a sort of transverse band. The first containing the brachio-cephalic opening was free from all fibrinous clot; the second with the left carotid and subclavian, was almost entirely obliterated by stratified layers of fibrin, the embouchure of those vessels being closed thereby. M. Rendu thought that absence of the radial and carotid pulse together with increased peri-

cardiac dulness, and an absence of cardiac and aortic murmurs should lead one to suspect the condition found.

CAUSE OF LEPRA.

Professor Rudolf Virchow presented before the Berlin Medical Society the larynx of a child recently dead of lepra. Virchow remarked that the whole upper larynx, from the edges of the epiglottis to the tone cords, was involved; the region affected presenting the appearance of an enormous edema glottidis. The parts were swollen with irregular surface and beginning ulceration. Syphilis is the only current disease presenting a like appearance. The spleen was found to be considerably swollen though the presence of immense numbers of small bodies smaller than the proper Malpighian corpuscles. These bodies under the microscope proved to be full of the bacillus lepræ. Virchow considers this to be a case of splenic tumor caused directly by the accumulation of bacilli in the parenchyma of the organ. Virchow, in view of the inaccessibility of the spleen to infection, regards this case as undoubtedly demonstrating the connection between parasitic and leprous growths.

DISEASED BRONCHIAL GLANDS.

It is well-known that the lymphatic glands situated about the bifurcation of the trachea, some ten or twelve in number, may in various ways give trouble more or less serious. They may enlarge and on account of their position compress the trachea, and to such an extent as to cause marked compression with difficult breathing, laryngoscopic examination will exclude obstruction in the upper air passage. At a late meeting of the London Pathological Society (*Med. Times*, No. 8, 1885), a singular accident from enlargement of these glands is described. A boy, aged 7, having had a croupy cough and stridulous breathing, of which little notice had

been taken, the child running about as usual, awoke suddenly from sleep, screaming and coughing and struggling for breath. He died in about ten minutes. At the time of the autopsy all the mediastinal glands were found enlarged and caseous, those in front of the trachea being largest. The lower part of the trachea was blocked by an oval, partially softened, caseous gland, which had been extruded through an ulcerated opening in the anterior wall of that passage just above the mouth of the left bronchus. The perforation led into an encapsulated space in front of the windpipe containing caseous debris and traces of gland tissue.

Another member reported a very similar case; an ulcer had formed in the left bronchus, through which some softening caseous gland had been squeezed, and, plugging the bronchus, caused sudden death.

SYPHILOCOCCI.

From time to time the medical world is brought to the tip-toe of expectation by the announcement that the micro-organism which constitutes the efficient cause of syphilis has at last been hunted from the obscure cells among which it has so long blushed unseen and has been dragged into the light of the microscopic field. In *Le Progrès Médical* M. Bricon some months ago gave us a historical sketch of the pursuit of the syphilococcus, beginning with Hellier and Klotzsch in 1869, mentioning Lorstorfer in 1872, and, more at length, the researches of Klebs in 1878. These were by far the most thorough and accurate that had so far been made. He described both micrococci and rods, which he claimed, could by inoculation transmit the disease.

Amongst Americans, M. Bricon refers to Cutter of Boston, and Bermann of Baltimore, each of whom did some original work in this field.

In 1881 Aufrecht of Magdebourg claimed to have found micrococci in syphilitic papules, and in 1882 Birch-Hirschfeld, followed

by Peschel, described cocci, occurring by threes, fours and fives in gummata, mucous patches and hard chancres.

In the same year Martineau successfully inoculated a monkey and two pigs with a culture fluid containing bacteria obtained from an indurated chancre. These experients, though severely criticised, are noticeable as the only successful inoculations of syphilis on the lower animals ever performed.

After mentioning the bacteria discovered by Morrison and the micrococci of Barduzzie, M. Bricon concludes that syphilis is probably a parasitical malady, and that its microbe is probably a micrococcus.

And now comes Dr. Sigmund Lustgarten, of Vienna, who believes that he has found in syphilitic products a constantly present bacillus, resembling those of lepra and tuberculosis. It was always found enclosed in cells about twice the size of white blood-corpuscles. These cells are believed to be migratory and were found in the initial sore, *in a lymphatic duct*; in papules, between the prickle-cells of the rete; and, strange to say, in tertiary lesions and in gummata in the new-born.

Dr. Lustgarten is soon to give to the world a more detailed account of his discovery. We may add that no bacilli were found in chancroids.

SEWAGE FUEL.

Carl H. Von Klein, of Dayton, O., contributed a paper at the last meeting of the Ohio State Sanitary Association in which he gave the results of studies and experiments which he has carried on for several years with reference to the best mode of disposing of night soil or human excrement. The question arose in his mind whether it might not be possible in some way to convert the decomposing matter into fuel. After a long course of experimentation he has discovered a method for the accomplishment of this,

which he says may be carried out either in a vault or an open field. He describes the method as follows:

"For example, take a vault containing forty barrels of excrement, throw in one barrel of chloride of sodium (salt). Twenty-four hours after, throw in fifteen bushels of unslacked lime. This will form chlorinated lime; the fumes may be started with four ounces of nitric acid. Let it remain for eight days; then it will all be dissolved and the contents disinfected. Next add seventy-five pounds sal soda. This will solidify within ten days, unless there is a very great excess of liquid, in which case the proportion of lime may be increased, thus completely and entirely disinfecting and deodorizing the mass; and it may now be made into bricks, which will take about thirty days to dry in the open air, and be ready to use as fuel. It is odorless and in every way cleaner than any other fuel known. It can be seen that all of the ingredients used with the animal and vegetable matter have disinfectant qualities. It produces a better flame and retains more heat than Allegheny coal; the salt and soda both having flame-inducing qualities, and the lime the heat-retaining quality."

The expense he estimates as follows:

For forty barrels of excrement,

1 barrel of salt, - - - - -	$1.00
15 bushels of lime at 12c. - - - -	1.80
75 pounds of soda at 1c. - - - -	.75
Labor (one day), - - - - -	2.00
	$5.55.

This will give a product equal, he claims, to three tons of coal, which at the rate of $3.50 per ton would cost almost exactly twice as much as this new fuel.

The same mode of treatment he claims is applicable to the solid deposit from sewage, which could readily be collected by having receiving basins at the outlet of the sewers.

If further experiments shall demonstrate the practicability of

applying this treatment on a large scale, Dr. Von Klein has made one of the most valuable discoveries of modern times and has solved one of the most difficult problems that sanitarians have ever encountered.

RAILWAY SANITATION.

The subject of public health as it is affected by railroad travel and by the condition of railroad property is one to which very little attention has thus far been paid. That such attention is necessary becomes evident to any one who travels much and observes the condition of urinals, privy-vaults, water-closets, etc., on cars and at stations and depots.

Through the courtesy of Dr. W. B. Outten, Chief Surgeon of the Missouri Pacific Railway Co., we have received copies of the blanks that are in use in the sanitary inspection of the section houses and stations of all the lines operated by that immense railway system.

There are now five inspectors at work in addition to what is done by members of the Hospital Staff. These blanks call for information with respect to the situation of the buildings with regard to the general level of surrounding land, as well as the material of which it is constructed, character of foundation, condition of cellar or ground under the building, whether there are any accumulations of filth or garbage, the condition of water-closets or privy-vaults, distance of the latter from building and from water-supply, nature of water supply, character of drainage, etc. Finally, there is space for the entering of any recommendations which in the opinion of the inspector would conduce to the improvement of the sanitary condition of the buildings.

One copy of the "inspection return" is kept on file in the main office. Another copy is sent to the superintendent with a letter calling attention to the unsanitary conditions found to exist and to the recommendations as to their correction. This letter is for-

warded by him to the Road Master or Foreman of work, who returns it to the Superintendent when the unsanitary conditions have been corrected. It is then returned to the main office and a reinspection is made to see if all is right.

Three kinds of disinfectants are used which are designated No. 1, No. 2 and No. 3 for convenience in ordering by mail. These different disinfectants are used freely but with caution, so as to avoid any danger from the one containing poisonous ingredients.

Under this systematic inspection and correction of all unsanitary conditions that are thereby discovered, the property of this railway system will soon be placed in a thoroughly satisfactory condition as regards sanitation.

It is a matter of some interest that the Missouri Pacific is the one to take the initiative in establishing an efficient sanitary department, and Dr. Outten has our hearty congratulations upon the opportunity so afforded him of organizing *de novo* such an important branch of sanitary work.

THE ST. LOUIS CITY COUNCIL AS A CHOLERA ENCOURAGER.

The readers of the COURIER have in mind the leading paper in the May number, on the danger of wells as regards the public health. This paper represented a part of the strenuous efforts made to bring about a much-needed purification of the city; a purification that had been practically altogether neglected, and to effect which the local profession and business men had joined forces. After a great deal of pressure an ordinance was passed, not such as was desired and the fact of a probably impending visitation of cholera loudly demanded, but it was something gained. It was determined that the large proportion of six grains of chlorine to the gallon present in any well water should condemn it, and that the well should be immediately filled. The difficulty of getting city

officials to pass this necessary ordinance will be the better appreciated when it is noted that many of the six to eight thousand surface wells were upon the sidewalk in front of bar rooms; the well watered the horses, the bar provided for the teamster. The omnipotence of the saloon-keeper in local public affairs is, unhappily, too well known to need comment, and the tender connection between the city officials and the wells is explained.

However, an ordinance was passed, and, in spite of obstacles, many wells of first-class nuisance power have been closed, amidst great clamor from interested parties. At a late session of the city council, as reported in the *Missouri Republican*, a Mr. Devoy submitted a report of the committee on "public improvement" (!) recommending the repeal of the stringent well-filling ordinance, and urged its adoption. Some of Mr. Devoy's arguments are in the highest degree edifying. "The ordinance was too stringent." Now the limitation to six grains of chlorine per gallon of well water was much too lenient. In fact, the great probability is, that there is scarcely a well in the whole city, certainly none in the older parts, where the earth is saturated with filth and the fissured limestone conducts sewage plentifully into every well, but what is polluted and should be filled up. This Mr. Devoy must know if he has taken the trouble to look over the testimony that has been so abundantly furnished this year; complete essays with telling illustrations have been distributed throughout the city and even in the street cars and other public places for the public information; so that the most ignorant could not plead lack of explanation of the whole matter. It was clearly stated that not only were all these wells certain dangers in case of an epidemic, but that at all times, by reason of their sewage contents, they were directly productive of diphtheria, typhoid and diarrheal affections. These are commonly recognized facts, yet Mr. Devoy and associates blandly state upon the floor of the chief legislative assembly of this great city, and amidst an intelligent community, that the ordinance, which really exempts many of these pest-holes, is "too stringent!" Further,

even this statement is not too daring. Mr. Devoy says that the matter had been carefully investigated and it had been discovered "that some wells famous for their healthful qualities contained as much as four hundred grains of chlorine. The celebrated Belcher well (a deep artesian well striking an abundant flow of sulphur mineral water) contains two hundred and eighty-one grains." Why did not this Solon also cite the Atlantic Ocean? also, that at meals we use with apparent impunity a condiment containing 100 per cent. pure sodium chloride, the source of the chlorine? Strange that he omitted such obvious illustrations of his position. It is not strange that he was instantly charged with "demagogism" and catering to "the violent ignorance and prejudice of the multitude," a charge that those not interested in securing such votes will regard with a considerable degree of complacency.

Western Society for Psychical Research.—A society has been fully organized in Chicago under the above name for the prosecution of such studies as have been instituted by the British Society and the American Society for Psychical Research, the headquarters of which are at Boston. It is not desired that the new society shall be local in its membership, but that those interested in the subject all through the country, and especially in the West, should join this society. The president of the society is A. Reeves Jackson, A. M., M. D. The vice-presidents are Rev. C. G. Trusdell and Prof. R. Welch. The secretary and treasurer is J. E. Woodhead.

We heard a rumor some months ago of the organization of such a society in our own city, but as nothing definite has resulted, it probably proved an abortion.

St. Louis Medical College.—The only change announced in the corps of instructors of the St. Louis Medical College is that Dr. F. A. Glasgow is to be the lecturer on Gynecology *vice* Dr. G. A. Moses, resigned.

BOOK REVIEWS AND NOTICES.

Micro-Chemistry of Poisons, including their Physiological, Pathological and Legal Relations; with an Appendix on the Detection and Microscopic Discrimination of Blood: Adapted to the use of the Medical Jurist, Physician and General Chemist. By Theodore G. Wormley, M. D., Ph. D., LL. D., etc. With Ninety-six Illustrations upon Steel. *Philadelphia: J. B. Lippincott Company.* 1885. 8vo.; pp. 784; cloth; $7.50. (St. Louis: J. H. Chambers & Co.)

Prof. Wormley's work upon the Micro-Chemistry of Poisons has been for nearly two decades recognized as a standard authority by toxicologists, jurists, physicians and chemists.

The new edition now before us is greatly improved, giving us the results of the distinguished author's labor in the same department since the first edition was published. The old text has been thoroughly revised, the chemical nomenclature having been adapted to the latest accepted views of the best chemists.

While the work will find its highest appreciation from those who are engaged specially in toxicological studies and research and from jurists and others concerned in medico legal investigation, there is a great deal which will prove interesting and valuable to the general practitioner, inasmuch as most of the articles which are used as poisons are among the most valuable medicines that we have, and the more perfectly acquainted with the toxic action of a drug he may be, the more effectively will he be able to use it as a remedial agent.

The study of each subject is thorough and exhaustive. Part First discusses Inorganic Poisons; Part Second treats of the Vegetable Poisons; while the discrimination of the blood is considered in the appendix as noted on the title page.

The steel plates, which are beautifully executed, were drawn from nature and engraved by the wife of the author, with the exception of the last one, showing the apparent size of the red blood

corpuscles under a power of 1150 diameters, which was engraved by their daughter, Mrs. J. Marshall. A chromo-lithograph as a frontispiece gives eight blood spectra.

The publishers have given an admirable mechanical execution of this most valuable treatise.

NEURALGIA AND THE DISEASES THAT RESEMBLE IT. By FRANCIS E. ANSTIE, M. D., London, etc. *New York and London: G.P. Putnam's Sons.* 1885. Small 8vo.; pp. 233; cloth, $1.25. (St. Louis Stationery & Book Co.; J. H. Chambers & Co.)

The date on the title page is 1885, but the work is simply a reprint of the former edition published in 1871. It is too well known to require an extended criticism. It is a classic on its subject.

We are sorry that the publishers used such small type in reprinting this volume. It is an imposition on the best of eyes to tax them with the reading of such print, especially at night, when most busy practitioners have to do their reading.

BOOKS AND PAMPHLETS RECEIVED.

Sanitary Suggestions, or How to Disinfect our Homes. By B. W. Palmer, A. M. M. D. Detroit: Geo. S. Davis & Co., pp. 55; 12mo.; paper; 25 cents.——System of Medicine by American Authors. Edited by Wm. Pepper, M. D., LL. D, assisted by Louis Starr, M. D. Vol. II. Philadelphia: Lea Brothers & Co. Large 8vo.; pp. 1312, sheep. (Holdoway & Co., St. Louis.)——Hay Fever and Its Successful Treatment. By Charles E. Sajous, M. D., Illustrated with thirteen wood engravings. Philadelphia: F. G. Davis, etc. 1885. 8vo.; pp. 103; cloth.——New Map of Boston with New Map of the Harbor. Geo. H. Ellis, Boston.——Endometritis Fungosa. By James B. Hunter, M. D. (Reprint from the Medical Record.)———Illinois State Board of Health, State Sanitary Survey.——The Influence of Sea Voyaging upon the Genito-Urinary Functions. By J. A. Irwin, M. A., M. D.——Some Interesting Reflex Neuroses. By John J. Caldwell, M. D., Baltimore, Md. (Reprint from Virginia Medical Monthly.)——The Failure of Legislation in Limiting the Spread of Venereal Diseases. By E. W. Allison, M. D., and W. E. Ashton, M. D. (Reprint from Proceedings Philadelphia Medical Society.)———Shall we Hang the Insane who Commit Homicides. By Clark Bell, Esq., of New York.

REPORTS ON PROGRESS.

SURGERY.

Styptic Discs.—Edward Lund recommends as of special service in arresting the oozing of blood in slight wounds, as razor cuts in shaving, leech bites, etc., tannin discs, which are made by soaking a sheet of bibulous paper in a strong alcoholic solution of tannin, 45 grains to each fluid drachm of absolute alcohol and allowing it to dry; then cutting it in pieces of convenient size. They are cleanly, do not excite ulceration, are not deliquescent, are always ready and of constant strength.—*Brit. Med. Jour.*, June 6.

Gonorrhea in the Female.—Martineau stated recently that in specific vaginitis the pus is always acid, while in the simple it is alkaline. According to this view a piece of litmus paper will determine the character of the discharge.

Injections of Iodine in Goitre.—W. J. Tivy reports that he has treated thirty-three cases of goitre by means of iodine injections, having made 290 injections of thirty to sixty minims each, the number of injections to each patient averaging about nine. Most of the cases had both lobes of the thyroid enlarged and therefore he generally made an injection into each lobe at each sitting. In no case was faintness observed, and the only discomfort occasioned by the injection was now and then neuralgic pains behind the ears, or in the teeth, lasting a few minutes, and in one case a rather troublesome hoarseness, continuing for a few days.

All of the cases were more or less successful, most of them being perfectly cured in from three to six months.

In making injections of iodine for goitre care must be taken to avoid puncturing the trachea or one of the large veins. A specially safe locality for the injections lies between the anterior jugular vein and the sterno-mastoid muscle. The injection should be repeated every week for three or four weeks, and then every two or

three for three or four more sittings, until a marked diminution in circumference of the neck is perceived. Some diminution is generally seen within ten days after the first injection.

Tight collars are to be avoided, and any strain to the neck must be guarded against while the treatment is being carried on.

He regards the operation as an efficient and by no means an unsafe one.—*Brit. Med. Jour.*, Mar. 28, '85.

Molasses as a Dressing for Burns.—EDWARD LUND states that in scalds and superficial burns upon the face and neck in young children the application of molasses as a continuous dressing until complete cicatrization is effected, is an admirable remedy, always handy. The best mode of applying it is to take blotting paper or soft white-brown paper torn into pieces about half an inch by an inch and a half, the torn edges being more fluffy and absorbent than when cut. Dip the pieces into the molasses and so lay them upon the part, one by one, as to cross in every direction, overlapping and uniting so as to form a closely fitting mask or shield. If the molasses be in excess of the dressing around the edges it may be removed by wiping with a dry cloth, and the edges may then be dusted with flour, oxide of zinc or other drying material.—*Brit. Med. Jour.*, June 6, '85.

MEDICINE AND THERAPEUTICS.

Ice for Congestive Chills.—L. B. ANDERSON states that during forty years he has pursued the method of treatment of congestive chills which was first introduced by his father in 1812. Externally he applies chloroform upon a handkerchief or other cloth folded several times. This will make a profound impression almost immediately when no perceptible effect is produced by mustard, capsicum or other similar agents. He applies it first to the epigastrium, then to other parts of the abdominal surface, and then to the spine. In addition to this he administers broken ice as rapidly as the patient can be induced to swallow it, and in large quantities, even to the extent of a quart or two. The ice affords relief to the patient, reduces the congestion, restores the circulation to the surface, and when this effect is produced the patient is ready to receive and be benefited by quinine, which, in the stage of congestion, he regards as injurious, rather than helpful.—*Therap. Gazette*, Jun. 15, '85.

Bicarbonate of Soda in Tonsillitis.—As the result of its use in one hundred cases, Theo. M. Kendall recommends the use of bicarbonate of soda in the treatment of tonsillitis.

All his cases seem to have been in adults. Of sixty-two patients, aged between eighteen and twenty-four years, the duration of the disease was thirty-six hours in twenty, and forty-eight hours in forty-two cases. Of thirty-eight patients, aged between twenty-four and forty-eight years, the duration in twenty cases was forty-eight hours, in fifteen cases was five days, and in three cases was six days.—*Brit. Med. Jour.*, June 13, '85.

New Treatment for Diphtheria.—R. J. NUNN read before the section of Practical Medicine, Materia Medica and Physiology of the American Medical Association a paper in which he reported the results obtained in fourteen cases of diphtheria by a treatment of which the salient features are:

1. The frequent application by spray and soft camel's hair brush of the peroxide of hydrogen, which will dissolve such parts as are soft and flocculent.

2. The application with a powder blower of powdered papayotin to the surface thus cleansed as carefully as possible with the peroxide of hydrogen, no food, drink or medicine being taken for twenty or thirty minutes after applying the powder.

3. The administration every ten or fifteen minutes (except immediately after the application of the powder) of a few drops of a general germicidal solution, a solution of biniodide of mercury, one part to two thousand (one grain to about four ounces of water) having thus far proved best.

This is to be continued until the membrane has disappeared, when the local treatment may be stopped, but the mercurial should be continued at longer intervals until all danger of paralysis has passed. Of fourteen cases eleven recovered without sequelæ. Three died. One of these was treated with the peroxide of hydrogen alone, recovered from the direct attack, but succumbed to the paralysis.—*Jour. of Am. Med. Ass'n*, June 13, '85.

Tubercular Infection.—*The British Medical Journal* reports a case in which a phthisical farm laborer at Charenton, France, who was failing and unable to do heavy work, was put in charge of the poultry yard. He coughed and expectorated constantly, and it was observed the fowls swallowed the sputa with avidity. In a few

weeks they began to die off. One of them was sent to the veterinary school at Alfort, and, on examination, the lungs and liver were found to be infected with grayish white tubercles of the size of a pea. Numerous bacilli were found in microscopic sections.

Bromide of Nickel in Epilepsy.—DR. R. LEAMAN has used this new bromide in a considerable number of cases and regards it as a valuable addition to the therapeutics of epilepsy. The best results were obtained when the attacks took place regularly and at comparatively long intervals.

It disturbs the digestive tract less than the other bromides, especially when administered in the effervescent form. The dose is five to ten grains. One teaspoonful of the granular effervescent preparation contains five grains of the salt.—*Med. News*, April 18, 1885.

Bromides to Prevent Iodism.—DR. H. S. NORRIS reports the successful combination of bromide with iodide of potassium in the treatment of a syphilitic patient who was so sensitive to the effect of iodine that even three-grain doses of the iodide produced coryza, headache, swelling of eyes, etc. After vainly trying all sorts of iodine preparations he gave the bromide in combination with the iodide (two grains of the former to each grain of the latter) and was able to gradually increase the dose to fifteen grains of the iodide three times daily without any unpleasant iodine symptoms. As a test he gave one dose of ten grains of the iodide without any bromide and the result was such a severe coryza that all treatment had to be omitted for thirty-six hours.—*Med. News*, May 23, 1885.

Exophthalmic Goitre.—DR. A. D. ROCKWELL says that there seems to be a tendency on the part of physicians to reserve for final trial in treating this disease that which the best experience indicates as giving most favorable results, viz., the application of electricity. He says that in these cases we should (1) attend to diet and hygiene; (2) give internal medication; (3) apply electricity.

A bland, easily-digested diet, avoiding all stimulants, tea and coffee, and using milk freely are to be urged in all cases. Of all remedies to be used internally a combination of iron, zinc, digitalis and ergot has given the best results; but the measure on which he places the most reliance is the systematic application of electric-

ity. In some cases it is necessary to continue the treatment for considerable time even for several months before the full effects of treatment become manifest.

Dr. Rockwell's mode of applying the electricity is to first place the cathode over the cilio-spinal centre, and the anode in the auriculo-maxillary fossa, gradually drawing the latter, after a few moments stabile application, along the inner border of the sterno-mastoid muscle to the sternum. The second step is to place the cathode over the goitre and the anode in the region of the solar plexus.

Of fifteen cases that were persistently and steadily treated, electricity being the main reliance, nine were either completely or approximately cured, three decidedly improved, one only slightly benefited, while in two cases no appreciable results followed.—*Gaillard's Med. Jour.*, May, 1885.

Hypertrophied Heart.—Dr. Chas. W. Dulles at a meeting of the College of Physicians of Philadelphia, March 4, 1885, presented a remarkable specimen of essential hypertrophy of the heart.

The patient from whose body the specimen was obtained, a young man 18 years old, of unusually large frame, had long suffered from rheumatism when Dr. Dulles first saw him in an acute attack. He then had an enormously dilated and hypertrophied heart with a strong, harsh, mitral systolic murmur. There was no albumen in the urine nor were there other evidences of renal disease. The only good result in the way of treatment was obtained by the administration of twenty-grain doses of potassium iodide three times a day. Under this treatment the murmur disappeared, the cough greatly diminished, the excess of urates disappeared from the urine; he slept and ate well, and was able to be about. After six weeks of comparative comfort the symptoms became again aggravated. He died asphyxiated in one of the attacks of severe dyspnea after having been temporarily relieved by a hypodermic injection of hydrochlorate of pilocarpine, one-third of a grain.

At the autopsy the abdomen was found to contain about two quarts of clear serum, and each side of the thorax about as much. There was general edema of the feet and legs. The lungs were compressed, but not diseased, though they were edematous. The

liver was somewhat fatty. The spleen was hard and tough, but of normal size. The kidneys were large, congenitally lobulated, and in a state of cyanotic hypertrophy. The heart was enormously hypertrophied, weighing, after all the adherent parts were thoroughly removed, forty-eight ounces. The pericardium was everywhere firmly adherent to the heart, and could not be separated from it, except with the knife. There was, therefore, no pericardial cavity whatever. After opening and washing out the clots from the heart, the weight was forty ounces. All the valves were healthy, and seemed to be competent. The mitral orifice was enormous, measuring two and a half inches across. The muscular walls of the heart were symmetrically hypertrophied. The whole organ was about the size and had about the appearance of that of a bullock.

That heredity is an influence concerned in the case is evidenced by the fact that a younger sister of the patient has the same condition of hypertrophy.

OBSTETRICS AND GYNECOLOGY.

Rupture of Uterus During Labor.—DR. B. F. BAER records a remarkable case of rupture of the uterus which he saw with Dr. H. M. Fisher, who had been called to the case. The patient was under the care of a midwife who stated that everything was proceeding properly. The labor pains continued for several hours when she suddenly felt something "break in the womb," and the labor ceased. Immediately she began to complain of sharp pain all over the abdomen and to lose blood in great quantity from the vagina. She went into a state of collapse, and those present thought she was dead. Soon after she began to rally and they concluded to wait for a recurrence of labor before seeking p roper medical advice. The abdomen was sensitive, nausea and vomiting were present and on the sixth or seventh day there were several well-marked chills. On the tenth day after the labor bega n, Dr. Fisher first saw the patient and diagnosticated rupture of the uterus with retention of the fetus and the placenta.

The next morning Dr. Baer saw the patient with Dr. Fisher. As she lived in a hovel in a dark court of the city (Philadelph ia), they both urged removal to a hospital. But the woman and her

husband both refused to permit either such removal or any surgical interference. She lingered on for four days longer, when the patient and her husband begged for any interference which the doctors thought best, but still refused to be taken from home. In spite of the exceedingly unfavorable circumstances and surroundings they consented to do what they could. The patient was placed on a table and was anesthetized with sulphuric ether. Drs. Christine, Fisher, W. B. Hopkins and Barber were present and assisted. Dr. Baer found the placenta decomposed and putrid, but still attached to the cord, hanging from the vulva. This being removed and the vagina irrigated with carbolized water,he introduced his hand through the os uteri directly into a cavity which contained the child. He grasped a foot and, making continual traction while Dr. Barber supported the abdomen, he delivered an almost putrid fetus, the head entirely collapsing as it was dragged through the vagina. A large quantity of excessively offensive putrilage escaped immediately after the removal of the child. The parts were then irrigated with carbolized water. Introducing the hand again the doctor found that an adventitious sac had been formed, completely separating the child from the abdominal viscera. Passing his fingers into the cavity of the uterus which was displaced to the left, Dr. Baer removed several fragments of placenta which had been retained. The whole right side of the uterus from just below the Fallopian tube to the vaginal junction seemed to be split open and the edges of the rent were continuous with and were glued to the new cavity. The cavity was washed out with a stream of carbolized water until this returned clear. The woman livid ten days after the operation—twenty-five days after the accident. Post-mortem examination confirmed the diagnosis as to the condition present.—*Am. Jour. of Obstet.*, June, 1885.

Cimicifuga Racemosa; Its Effect in Parturition.—Dr. J. S. Knox having tested the action of this drug in one hundred and fifty cases draws the following conclusions concerning its value:

1. Cimicifuga has a positive effect upon the parturient woman, quieting reflex irritability. Nausea, pruritus and insomnia, so common in the last six weeks of pregnancy, are always bettered, and often disappear under its administration.

2. Cimicifuga has a positive antispasmodic effect upon the parturient woman. The neuralgic cramps and irregular pains of the

first stage of labor are ameliorated and altogether abolished. In fact, during the first indiscriminate use of the drug in all cases I had the mortification, with a few women, of terminating the labor so precipitately, and without prodomic symptoms, as to be unable to reach the bedside before the birth.

3. Cimicifuga relaxes uterine muscular fibre and the soft parts of the parturient canal, by controlling muscular irritability, this facilitating labor and diminishing risks of laceration.

4. Cimicifuga increases the energy and rhythm of the pains in the second stage of labor.

5. It is my belief that cimicifuga, like ergot, maintains a better contraction of the uterus after delivery. It is my habit, however, to administer 15 to 30 minims of fluid extract ergot after the birth of the fetal head, and I have but few opportunities of testing the effect of the cohosh.— *Chic. Med. Jour. and Ex.*, April 1885.

WATER AND CHOLERA.—No amount of impure water will cause true Asiatic cholera unless the germs of the disease have already got into it. But contaminated and polluted water will render cases of Asiatic cholera hopeless; it is quite as dangerous and injurious as unripe and unwholesome fruits and vegetables, and spoiled meats and fish. The United States and other navies have long protected their crews not only from cholera but from dysentery, tropical diarrhea, and almost all bowel complaints by the exclusive use of distilled water. When hundreds and thousands of cases of diarrhea and cholera occur daily or weekly in large towns, it is quite certain that cholera discharges have got into the drinking water supplies. Then nothing but boiled or distilled water should be used. The alkaline mineral waters may be allowable as long as absolute disease has not set in, but not afterwards.—J. C. Peters in *N. Am. Rev.*, August, 1885.

THE ILLINOIS STATE BOARD OF HEALTH is now engaged in revising the "Official Register of Physicians and Midwifes." Any notification of changes, omissions, or errors will be regarded as a favor, as the Board wishes to make the coming register as correct as possible. Address, Secretary State Board Health, Springfield, Illinois.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, June 2, 1885. Dr. Nelson in the Chair.

Treatment of Scars.

Dr. Prewitt exhibited a case illustrating the healing of scars. This patient a number of years ago was kicked in the face by a horse. No physician saw the wound. It was dressed with cloths; perhaps a little alcohol or something of that sort was applied to it, and it was allowed to heal. The result was that it produced not only a scar but a depression several lines in depth at one point that disfigured the face very considerably. A photograph was shown which, by using a magnifying-glass, gave an idea of the depth and extent of the scar. The scar extended from the border of the lip up to the malar bone, and drew the lip up, and occupied the breadth of at least three quarters of an inch in each direction at its broadest part. Dr. Prewitt simply cut out the scar, cut under the depressed portion, drew the cheek a little forward and the lip downwards, whereas it was drawn up before, and then put in three pins, two bringing the edges of the wound together and the third one beneath a portion of the integument which had been detached at the depression so as to bring the deeper portions in contact, causing union. A linear cicatrix resulted. A little redness still existing at the points where the pins passed through will of course disappear and the improvement is very decided, not only in the appearance of the face, but in the outline of the mouth as well.

The second case was one of contracted fingers due to a burn; the index finger and the next finger were drawn down with a cicatricial band; it didn't involve the tendons. In this case Dr. Prewitt had adopted the method of Dr. Post, of New York, who has succeeded

in relieving some very remarkable deformities of the hand by this process. This hand was not entirely well. It was operated on four weeks ago; the fingers were not quite straight. It was burnt about fourteen years ago, when the young lady was two years of age; she put her hand upon the stove. The operation consisted in making numerous diagonal cuts through the cicatrix, straightening the fingers and keeping them straight until union occurred, filling in between the parts with integument, making the scar very flexible and pliant. Of course they will have to be watched for a while to prevent contraction, but the result, the doctor thought, would be very good. The tendons are perfectly flexible.

Dr. Hardaway said he had noticed a point with regard to scars concerning which he would like a little further information from those who have had more experience. The first case which he observed was that of a very stout lady, weighing 250 or 260 pounds probably, who had developed a full beard. She came to him for treatment by electrolysis. She had been treated before that by some quack who had inserted, he presumed hypodermically, acid of some description into the skin, with the result of producing quite a number of thick scars, which, however, were not deep enough invariably to prevent a free growth of hair. In using electrolysis for the destruction of the hair-follicles he saw with surprise the disappearance to a great extent in some cases by complete flattening of the elevated scar tissue. In a case of extensive port-wine mark occupying the right side of the forehead and nose and a portion of the lip in a young lady, some one had resorted to the electro-cautery, principally on the forehead, which resulted in ulceration, suppuration, etc., leaving an elevated scar. Dr. Hardaway used electrolysis, running the needles into the cicatrix with the result of doing away with the scar, to a very great extent, flattening it out. So marked were the results in these cases that he thought perhaps it would be of value in the treatment of keloid, but so far he had not been able to carry it out in any case satisfactorily. He had treated two cases of keloid in this way, but in both cases the patients disappeared; they were dispensary cases and he was not able to follow them up.

SCARRING FROM ELECTROLYSIS.

Dr. Tuholske mentioned the case of a patient who had considerable acne of the face. The disease existed to such an extent indeed

as to make his nose of a uniform red appearance. He was very desirous of getting rid of this red appearance, and was treated by electrolysis, and after the treatment his nose was not pale, but perfectly white. A close examination showed that it was not a uniform white, but that there were white spots in such preponderance as to give the appearance of being a uniform white. This shows the amount of scarring which may result from the application of the electrolysis needle.

Dr. Hardaway stated that some years ago he introduced the method of treating port-wine mark by electrolysis; simply making a number of punctiform scars so as to rid the patient of the glaring deformity. Treating port-wine mark in this manner the mark disappears sometimes presumably by strangulation of the vessels, leaving quite an area without the supervention of scar tissue at all, but there will be a certain amount of scar tissue. He uses an exceedingly fine needle and makes the scars as minute as possible, and some areas of the port-wine color disappear entirely without scar. He regards the operation as an entirely feasible one for the removal of port-wine marks.

Hip-Joint Disease.

Dr. Todd presented to the Society the femur that was spoken of at the last meeting. Vid. p. 80. It was from a body in process of dissection which was found to have a singular state of things existing about the hip-joint. He at that meeting said that in his opinion the head of the bone was entirely absent The head being absent, the neck, the part which is uppermost, was covered by what he took to be very thick periosteum. The capsular ligament was very much thickened; the acetabulum was entirely filled with fibrous tissue and, instead of being concave, was convex. Both bones were sawed through and the legs thrown away before this condition was observed, but he thought there had been no shortening. The bone was taken from a man about forty-five years old, who had rather slender legs. The bone upon the diseased side was much smaller than usual. The question brought up at the last meeting was, what the condition of things was; and of course during the discussion there was something said about the epiphyses of the thigh bone. His opinion then was that the head of the bone originated from a distinct and separate centre from the shaft and neck, and he here presented one or two specimens showing

that plainly. Dr. Todd then exhibited the femur of a young elephant in which the epiphyses were completely separated from the shaft.

Dr. Steele said that Dr. Todd put the query at the last meeting without having the specimen, and several of those present detailed their views as to what might be the cause of the original injury. Dr. Mudd thought it resulted from hip-joint disease. He himself stated that it occurred to him it might be a diastasis, a separation of the upper epiphysis from the neck, that the head being thus separated and its blood supply being cut off the bone had been absorbed in time, leaving nothing but the neck or a portion of the neck there. Dr. Mudd thought that was impossible, because the neck and head belonged together to the upper epiphysis; that they were one. In proof of the position which he took at the last meeting he read from Stimson: "Separation of the epiphyses of the head from the neck has been suspected sometimes and verified once by examination. Bony union of the part takes place between the seventeenth and twenty-fourth year; and in those cases of fracture of the neck of the femur that occur in persons of that age the question whether the fracture might not follow the epiphyseal line will naturally arise." Dr. Hamilton quotes six cases in which this injury was suspected; Mr. Hutchinson mentions three others, one of them having been under his own care. Dr. Johnson gives the history of a case under the care of Dr. Wood which may have been either a separation of the epiphysis or a pure intracapsular fracture. The patient was a girl sixteen years of age, who had been caught between the wheels of a wagon. The fracture failed to unite and at her death, three years later, the head and neck were found soft and partly absorbed. Now if this case had lived longer the head would have been entirely absorbed, as it seems to have been in this case, and a portion of the neck; therefore he thought it not at all unreasonable that it may have been a separation of the upper epiphysis in early life and thus failing to unite.

Dr. Carson thought that the head of the bone was present and that changes had taken place in the neck of the bone. The separation of the head from the neck very often occurs in cases of hip-joint disease, and, as stated at the last meeting, in the first case of hip-joint which he excised the head was still in the acetabulum and the neck had formed an artificial joint.

Dr. Prewitt also thought that a portion of the head was still

present and that there was cartilage resting upon it underneath what seemed to be periosteum or new material. This might have been the result of injury or fracture; that could only be told by section of the bone. There was a portion of the bone there which was denuded and which showed evidence of disease and the neck of the bone had been largely absorbed. He thought pretty certainly that careful measurement would have shown that there was at least three quarters of an inch shortening of the bone.

Dr. Carson remembered having heard Dr. Pope state as a fact that injuries of the hip where there was no fracture nor dislocation were often followed by changes which produced shortening or absorption and disappearance of the neck of the bone, and Dr. C. thought Dr. Pope also stated there were cases on record and specimens in the museums where such had been conclusively proven, but he himself didn't know of any such case reported in the books, not having had time to look the matter up.

Fibroid of Uterus—Obstruction of Bowels.

Dr. Carson presented a fibroid tumor of the uterus which was the cause of an intestinal obstruction. The patient came into the hospital one week ago yesterday. He was called late at night, 11 P. M., to see her; found her pulse about 140. The patient was vomiting but not stercoraceous matter, simply watery fluids, sometimes presenting the appearance of pure bile. She was much distressed in appearance, with distention of the central portion of the abdomen. There had been no passage for a week. The physician in attendance had been giving her purgatives without any result. Dr. F. A. Glasgow stated to him that from the time he had seen the patient in the evening her condition had improved. She had not vomited when Dr. Carson saw her for two or three hours, and she had twice had a free passage of wind or flatus from the bowel. Taking this matter into consideration,as none of her family were present, he thought that they would not be justified in doing anything until the next day. The next morning matters were very little changed; she felt comfortable; the bowels were about the same; she had vomited once or twice in the interim. There was no stercoraceous matter,but when the nurse came into the room after she was brought into the hospital, and the patient had vomited, the nurse thought the patient had had a movement of the bowels; that was the only thing that approached stercoraceous vomiting. However, upon

examining the contents of the vessel there was nothing to indicate that such had been the case. In the morning it was urged that every effort at a reduction of this obstruction be made by throwing large quantities of oil into the intestines. He did not expect much from this, as he did not see how the oil could reach the small intestine, which he thought was the part obstructed, but he thought it would do little harm. However, in that he was now convinced they were mistaken, because he thought that the throwing of the oil into the intestine had a very bad effect and was very unfortunate in its results. When her relatives came to the hospital, the case was stated to them, and they said they realized the fact that there was very little hope; but they wanted her to have all the chances, and were anxious that an operation should be performed. Opening the abdomen they found the small intestine largely distended, much discolored, a track of intense redness showing intense congestion. A tumor was also found above the pubis. Upon the left side a band extended across from the pelvic wall, around which the intestine had coiled itself two or three times. In the effort to place the ligature around this band it tore and relieved the obstruction. The obstruction being relieved, the next procedure was to return the distended intestines. They found that with this tumor in situ it would be imposible to do that; although the woman's condition was very bad they decided upon ablation of the uterus. He then exhibited the uterus and fibroid masses which had been removed. This patient also stated that she had had several submucous fibroids removed from the womb years ago.

Dr. Frank Glasgow stated that this woman had an umbilical hernia, although it had not been down for a month. Feeling high up along the tumor one could feel a coil of small intestine crossing the tumor from right to left a little obliquely, and this intestine was not dilated at all; and then feeling through the hernial opening at the umbilicus one could there feel the coil of intestine passing cross-wise, and this was not dilated. The peristaltic action was very sluggish, still one could see the outline through the abdominal wall. The patient had had injections besides purgatives before she came into the hospital. At 8 o'clock in the evening her pulse was very feeble and very rapid and Dr. Glasgow then gave her a hypodermic injection of brandy and ether. At 11 o'clock her appearance had somewhat improved. During the operation hypodermic injections of brandy and ether were repeatedly given,

and afterwards a hypodermic injection of atropine which seemed to have a better effect.

Dr. Tuholske thought the case interesting in a good many points; first of all there were undoubted symptoms of obstruction and so many indications that the obstruction was a mechanical one. The fact that the umbilical hernia had disappeared externally might not be an absolute indication that it was not playing a role. He thought that everything indicated the necessity of an operation. The presence of a tumor made it imperative; the symptoms of obstruction due to pressure with any amount of strangulation would indicate the necessity for an operation: hence he thought as there was an acute obstruction, the operation was indicated from the very beginning. He related a case in which the patient was operated upon for an acute obstruction of the bowels after the disappearance of an umbilical hernia. An incision was made, as for strangulated umbilical hernia, expecting to find a piece of gut somewhere about the umbilical opening, but nothing at all was found about the umbilicus. No internal strangulated hernia was found anywhere, so that the wound was closed up and the patient put to bed; but the symptoms of obstruction continued and the place was re-opened and another examination was made, and again nothing was found; but on the post-mortem table it was found that there was a very narrow band of omentum which passed across a piece of the ilium and strangulated it. It would have required simply a touch of the knife to cut off the obstructing band. Now there the diagnosis was made altogether upon the supposition that the obstruction was due to umbilical hernia. The lesson is that when we meet with a case where there is a mechanical cause for the acute obstruction we should hunt for it until we find it and not give it up very readily. This case happened in the practice of a most eminent surgeon.

Dr. Prewitt said that case which Dr. Carson had reported illustrated the pertinacity with which medical men insist upon giving purgatives in cases of obstruction of the bowels: either from ignorance of the causes which usually produce the obstruction or from a vague notion that something can be gotten rid of, that an opening can be forced through the bowel, they will persist in giving purgatives always to the detriment of the patient. In the various cases of obstruction the only possible cases where purgatives might be resorted to with comparatively little injury are those which

are spoken of as fecal obstruction, and this is a very rare condition of things, for even in those cases where fecal accumulations take place to a very great extent, there is usually no obstruction of the bowel. There is oftentimes a track along side of the fecal accumulation and the patient actually has a diarrhea. The point which should be insisted upon is that in cases of obstruction purgatives should not be given. He regards it as absolutely wrong even where there is fecal accumulation. There is a better way in which it can be gotten rid of without resorting to purgatives at all. Purgatives act by stimulating the peristaltic action. Now, in cases of obstruction of the bowels there is violent peristaltic action, and the only effect which purgatives can have in such cases is to increase that which will result in causing stercoraceous vomiting. Of course every surgeon recognizes the difficulty in cases of obstruction of the bowels where there is a great distension in getting the bowels back after the operation is done. In ovariotomy there is never any trouble about getting the bowels back, because there is no distension, and besides that there is great distension of the abdominal walls leaving ample space for the replacement of the bowels. The doctor expressed the opinion that in those cases where the bowels are greatly distended we are perfectly justified in making punctures and collapsing the bowels in that way.

Dr. Carson said that he brought the specimen here for the purpose of impressing upon the Society the necessity of great care in cases of obstruction, because he thinks it is too frequently the habit of physicians to resort to purgatives when they can do no possible good. And then again operations for obstruction are put off too long, and the patient's life is lost where it might have been saved by the operation if done early. Some cases recover from apparently acute obstruction without operation; so do some cases of strangulated hernia recover without operation or without relief of the stricture by the hands of the surgeon, but at the same time how many perish as compared with those that recover? If we can get any good at all from the operation, it should be done very early and not put off until the last moment. He found in both cases that he had operated upon a great deal of trouble in getting the intestines back into the abdominal cavity; the abdominal walls are not distended as they are in cases of ovarian tumors and we have to crowd the in-

testines into a narrow space. However, with a little care and perseverance this can be accomplished, and if the obstruction has been entirely removed, it is but a very short time before the distention is relieved and the abdomen is flaccid and almost natural. In this case after the tumor had been taken out, even before the bandage was applied the abdomen was perfectly lax and flaccid and evidently the causes had passed away and relieved the distension.

Dr. Todd referred to the recent report by a very eminent surgeon of Berlin, of a case in which he relieved obstruction of the bowels by simply washing out the stomach with warm water.

Spinal Disease.

Dr. Steele exhibited an apparatus which he had prepared for the treatment of a case of spinal disease. Some time ago he read a paper before the Society, in which he stated that he believed it was detrimental to the patient to be deprived of fresh air, sunlight, exercise, etc.; that these were absolutely necessary to their well-being. This is not necessarily so. He had a patient who had been lying flat on her back for eight months with hip-joint disease, and was in fine condition and improving all the time. This appliance was intended to produce immobilization of the part. In the little patient for which this apparatus is intended the disease is in the second dorsal vertebra. He thought that he could best quiet the part by putting the patient on her back, so he had this moulded from a plaster of Paris cast. It is moulded like a shield, and after this has been applied the patient can be carried about in it, although she is never allowed to be upright.

Ununited Fracture.

Dr. Prewitt said four or five months ago a young man came from the interior of the state, who had received an injury of the left fore-arm about eighteen months ago. There had been a fracture of both bones of the fore-arm and very considerable laceration of the soft parts. The physician who attended him had treated this case properly but there was an overlapping of the fragments and non-union of the parts. There was undue mobility of the anterior portion of the fore-arm. He had quite good use of the arm; he could saw, cut and so on with it, and had quite a useful arm; but he was anxious to have something done, and Dr. Prewitt determined therefore upon resection of both bones. In cutting down

upon the radius he found the radial artery outside of the lower fragment and across it. He tried to save the artery, but in sawing the bone off he wounded and had to tie it. After sawing the bone through, he brought the extremities in contact and wired them together with silver wire. He applied an antiseptic dressing: There was never much rise of temperature; there was some suppuration. He left for his home some weeks after the operation with the bones partially united but still some suppuration occurring. Of course there was shortening of the arm, about two inches, as he cut off at least an inch from each bone.

POST-PHARYNGEAL ABSCESS.

A little patient came to the clinic April 1. The child, aged four years, was taken sick several weeks ago with difficulty in breathing. Slight fever had been present for a few days before coming to the clinic. On opening the mouth Dr. Prewitt found a quite marked swelling posteriorly and made a diagnosis of post pharyngeal abscess partially stopping up the throat of the child, causing great difficulty in swallowing. On making a puncture into it the pus spurted five or six feet across the room. He gave the child tonics, quinine, iron, etc., and on the eighteenth of the month she was completely well. Post-pharyngeal abscess is not of very frequent occurrence and is sometimes connected with disease of the vertebræ. In this case there was nothing that would seem to indicate that there was anything of this kind.

Stated Meeting, June 16, 1885—DR. STEELE in the chair.

ANEURISM OF ABDOMINAL AORTA.

Dr. Glasgow presented a specimen taken from a patient of Dr. Mayger, of this city. The patient was a young negress, 33 years of age, with no history of syphilis. Dr. Mayger stated that she had suffered for some three months with intense paroxysms of pain that resembled in a great many respects attacks of painters' colic. Between the attacks of pain she seemed to be tolerably well and pursued her duties. About three months ago he examined her abdomen and found a tumor situated immediately under the diaphragm; it was hard and pulsated. He suspected aneurism, and about a month ago Dr. Glasgow saw the case in consultation with

Drs. Carson, Gregory and Mayger. In the abdomen about the left epigastric region, almost at the median line, they found a tumor which pulsated. This was very hard to the touch and presented an almost conical or pointed top. The pulsations were directly from below upwards at the top, but on passing the fingers deeply around the tumor a lateral pulsation could be felt near the base. There were also in the abdomen several hard nodulated places, which led one to think of a thickened condition of the omentum. On listening to the tumor the blowing sound was heard over the top, that is the highest part when patient was lying upon her back. On passing a stethoscope down deep and pressing the sides a different murmur was heard; the murmur heard at the top was a blowing, while that at the sides was harsher and sharper. This murmur was heard very faintly above the diaphragm in the back. It was heard downwards towards the bifurcation of the artery: it was heard distinctly in the lower portion of the back. There was no perceptible difference in the pulsations of the femoral and radial arteries in time.

This was a case in which there were a great many difficulties in diagnosis. It resembled aneurism in a great many respects, and others pointed towards some hard solid tumor lying upon the artery; and there were points about the case which made a definite diagnosis almost impossible. Then this hard solid mass that was felt on top, which did not expand, and which seemed to pulsate freely from the underlying artery, seemed to point towards some cancerous degeneration or some tumor on the arterial walls. The difference in the character of the murmurs and the slight lateral expansion that you got by pressing the fingers deeply along the sides of the tumor would seem to point towards an aneurismal tumor. His diagnosis was aneurism with solidification of a part of the sac with fibrin.

On making the post-mortem the cause of these difficulties was very apparent, and it was a very curious tumor. Aneurism of the abdominal aorta he thought was rarely true aneurism, but here was a true aneurism of the aorta and on top of this a second sac solidified by fibrin. It was a double aneurism, a small one springing from the large one, and so situated that the smaller sac was immediately on top and could be felt as a tumor, and that gave the solidified feel that was found. The whole sac, that is the upper portion, was solid with fibrin. The aneurism lay immediately to the front of

the aorta and did not extend at all posteriorly; it seemed to be perfectly flat, the whole bulging towards the front. There was no history of a blow or kick or any injury at all.

Dr. Carson said that he saw the case some time before Dr. Glasgow. It presented the characteristics described by the doctor except that he did not discover at his first visit any expansion laterally or from the back forwards to the front, and the bruit at the time Dr. G. saw her was much more definite than when he himself saw her two weeks or more before, and his diagnosis was a solid tumor overlying the artery. There was no history of syphilis and no indications of it from examination of the patient. However the girl was a mulatto and had been waiting upon houses of prostitution here in the city for years before. There was no history of injury, and this trouble came on slowly and had evidently been making progress for sometime because she had complained of pain in the region just below the diaphragm for an indefinite time. He thought she had never borne children, but she had been pregnant. At a visit subsequent to the one made with Drs. Glasgow and Gregory, he changed his diagnosis to aneurism. The symptoms then were decided and left no doubt as to its true character. In the post-mortem they found the sac overlying the artery and opening into it. Then there was a filament of the omentum binding to it the parts around and forming this superficial or false aneurism which had formed over and above the true aneurism. The opening there was quite large and distinct. The pulsation or bruit heard with the ear to the projecting tumor did not seem to him that of an aneurism, but more a bruit from pressure of a solid body upon one of the larger vessels until their last visit, when it was quite distinct. The lateral expansion was marked and there was no question as to its true character. The aneurism had evidently ruptured and formed this sac which was formed by the external coat of the artery with the thickened omentum and inflammatory adhesions around it. The immediate cause of death was exhaustion; there was no rupture of the aneurism.

Dr. Leete asked why the question of syphilis was raised in connection with this matter?

Dr. Carson said that the woman was young and in aneurism or vascular dilatations one of the questions that almost always arises is whether it was syphilitic or not.

Dr. Leete said he believed that more cases of aneurism of the

abdominal aorta are discovered than are ever proven by post-mortem sections. He knew three cases in which abdominal aneurism was diagnosticated; but in not any of them did that condition exist. Two cases were in the same person. In the first case, on calling to see the patient, he found that she was nursing a young infant which was very strong and healthy, one of those hearty fellows who was constantly tugging at her breast day and night at will, and she was about the color of white wax, in the best sense of the term anemic and hydremic. Careful investigation entirely satisfied him that there was no aneurism. He instructed her to regulate her habits as to the nursing of the child, put her upon the most nutritious food, given in small quantities and at frequent intervals; and in a little time the trouble was lost sight of, her color returned, and he dismissed her. Less than three years later the late Dr. Paul F. Eves called at his office and asked him to have the kindness to come with him and see a patient, in whom he suspected that there was aneurism of the abdominal aorta. Immediately when they got into the house Dr. Leete recognized the same woman whom he had seen previously, and under similar conditions. She had another child and was in pretty much the same condition in which he had seen her on the previous occasion. He told the doctor his previous experience with her, and it was found that there was at this time also no abdominal aneurism.

Another case in which aneurism of the abdominal aorta was suspected was in a patient who had been sick and under great mental strain for a considerable time. She complained of a distinct beating in the abdominal region, but there was no sign of a tumor. He was satisfied that what seemed to be aneurism was owing, as in the two previous cases in the same person, to a thin condition of the blood. Of course the strong point in these three cases was that it was impossible to make out such a tumor as we ought to have with aneurism of the abdominal aorta. A diagnosis should not be formed merely on the sound, whether it be blowing, or purring, or whatever it may be, for in a great many cases these sounds may depend really upon the condition of the blood.

Dr. Previtt said that not long since he had a case of aneurism of the carotid artery, and there was no hard feel about it; a finger in the mouth could feel the tumor pulsating, and on the outside you could not feel anything but the wall in a manner analogous to a distended sac; there was no hard, indurated mass that you could

call a tumor, and he didn't think that necessarily there must be an indurated mass in the abdominal aneurism. He had seen several cases of abdominal pulsation that were very remarkable and that would naturally have been quite puzzling to anybody unless he had watched the case for a time; they were very marked throughout, and especially under the least bit of excitement, the pulsation was very marked indeed. Abdominal aneurism is almost invariably accompanied with pain that has lasted a considerable time during the whole formation of the tumor. He thought that as a rule there was not much difficulty in making a diagnosis, though at first one might be quite puzzled to decide whether it was an abdominal aneurism or a marked case of abdominal pulsation.

Dr. Carson said that often patients in the hospital called his attention to a very decided pulsation just below the diaphragm, and it was sometimes with difficulty that an aneurism could be excluded, the pulsation is so very marked and the bruit so very decided, and it was often, as Dr. Leete said, dependent upon a poor or vitiated condition of the blood. But in one case there was a very decided bruit dependent altogether upon derangement of the stomach. Whenever the stomach was full of gas and pressed upon the aorta there was a very decided pulsation and there was also a bruit. It is not always so easy a matter to make a diagnosis of aneurism, and an aneurism of some size may exist and still not be observed. Dr. Pope had related often to his students the case of a man who complained of a great pain at the pit of the stomach, but he never could discover a tumor. At the post-mortem, however, a large aneurism was found in the abdominal aorta.

Dr. Glasgow didn't exactly agree with Dr. Prewitt that all cases of aneurism in this region are easily diagnosed. He thought the diagnosis sometimes one of the greatest difficulty and sometimes absolutely impossible. Pulsation in itself is of very little value. The diagnosis has not only to be made between aneurism and nervous pulsation or pulsation that occurs in a debilitated constitution due to a watery condition of the blood, but also cancerous conditions of different organs adjacent when enlarged will press upon the vessels. We may have this in the pancreas, in the liver sometimes, also in the pylorus or the omentum. Cases of nervous pulsation are very readily recognized, for they have very few of the real characteristics of aneurism; they have pulsation and that is all. In aneurism we have murmurs, of different characters. In cases of hydremia we

also have murmurs and that is one reason why the case which is presented to night was surrounded with peculiar difficulties, the peculiar conformation of the sac and double sac together with this solid tumor pressing upon the vessel made the diagnosis very difficult, and the diagnosis of aneurism was really made through the lateral expansion which was felt, and which cannot be felt in a solid tumor.

DISLOCATION OF THE ASTRAGALUS.

Dr. Prewitt exhibited to the members of the Society a case of dislocation of the astragalus backwards. He remarked that the case had been examined by others and the diagnosis of dislocation of the astragalus has been disputed. He saw the patient some two months after the accident; there was then more swelling about the foot than there is to-day. He made then a diagnosis of dislocation of the astragalus backward. He thought the symptoms still indicated the existence of that accident, and brought some bones along in order to compare them with the man's foot. This, he said, was a very rare accident, since Hamilton says but eight cases are on record and of this number only one was ever reduced. That was a case where both tibia and fibula had been broken and perhaps the tendo Achillis divided. The symptoms that are given as indicating it are, the existence of a tumor which projects back against the tendo Achillis, the shortening of the front of the foot, and some depression at the site of the head of the astragalus. In this case instead of being a shortening of the dorsum of the foot, there was three quarters of an inch of lengthening. The arch of the foot was somewhat changed, the foot was disposed to turn inwards a little. In at least five cases Hamilton states that very good use of the foot had followed where the reduction had not been accomplished. In the case that Dr. Hamilton saw he states that the astragalus was dislocated backwards and to the inner side of the calcaneum. In Dr. Prewitt's one could trace the malleolus in almost its exact outline from above, downwards and around its point. The astragalus rests upon the tendo Achillis filling the space here. There was a depression in front of the tibia. The projection is limited; it is not all in front of the tibia but it is limited to this position immediately behind the tibia and beneath the tendo Achillis. Something was said about its being due to osteophytes or something of the kind. He didn't believe any surgeon would agree that that con-

dition would occur two months after the accident, and especially that it would be limited to an area like that, with no other evidence of enlargement of the tibia whatever. There was motion of the calcaneum upon the astragalus, and he thought also slight movement of the astragalus upon the tibia and fibula. The accident occurred December 22, 1883, and Dr. Prewitt saw the patient March 1, 1884, the latter part of February or 1st of March.

Dr. Tuholske thought the piece of bone that was felt back of the tibia and above the os calcis was a piece of the astragalus that was out of place. He didn't believe it to be just a plain ordinary dislocation backwards, but thought there was a fracture above the external malleolus; that the fibula was broken above increasing the width of the joint; that the astragalus was turned obliquely, and that there was motion between the os calcis and the astragalus. Also there was motion between it and the tibia, and he thought it situated very obliquely, which might account somewhat for its posterior position, and also for its not showing a corresponding amount of depression in front. He did not think that the piece of bone that was felt there could be the result of any inflammatory process as had been claimed by others who had seen the case. There was one thing that would still more completely explain this, and that was the supposition of a fracture of the astragalus with a certain amount of separation between the anterior and posterior portions leaving one protruding posteriorly and leaving that hollow in front of the tibia.

Dr. Leete said it would seem to him that an injury would almost necessarily be compound that would result in a fracture of the astragalus.

Dr. Carson thought that the only way to decide the true nature of the injury would be to make a dissection, but believed that there had been a fracture of the fibula above the joint, and also of the inner condyle. How to account for the projection backwards, unless it were the astragalus, he did not know, but there was one thing against that or at least against dislocation of the astragalus and that was the lengthening of the foot instead of shortening. He could not account for the great amount of displacement and the depression under the bone, but the parts had been altered very much by inflammation and certain diagnosis was impossible at this stage.

Dr. Mudd said it was hard to define exactly the injury in this

case. He was satis fied that there had been a fracture of the fibula, and probably the astragalus had been broken as well as displaced; the foot rotated or turned a little inward. The projection behind the internal malleolus he thought was largely produced by the astragalus, which was probably broken or twisted somewhat out of position and turned upon its articulation. He thought that the astragalus had been displaced and rotated. He thought at first that the tibia had been broken, but on further consideration he thought not.

Dr. Carson said it seemed to him that the amount of violence required to f racture the astragalus would produce a much greater injury, externally, than was there. He thought that probably, as Dr. Mudd had explained, the bone was twisted upon itself, the posterior portion of the bone being thrown inwards and the anterior portion thrown outwards, filling up the space, to a certain extent, under the fibula.

Dr. Mudd remarked further that the tibia presented nearer the sole of the foot, in the injured, than it did on the opposite side, and he thought that it was quite as easy in considering the appearance of the foot, to assume that the fracture occurred near the posterior extremity, probably through the body of the bone.

Dr. Prewitt stated that Dr. Cooper, of Boston, had reported a case where there was a fracture of the neck of the astragalus with dislocation backwards. He divided the tendo Achillis and other tendons and muscles that offered resistance, and the man recovered with quite a useful foot. It was not a compound injury and was seen not long after the accident. In this case it was not a compound injury. If there had been fracture of the fibula it seemed to him it would have been found, and also if there had been fracture of the tibia. Dislocation of the astragalus backwards he said was very rare, there being but eight instances of this accident; in the majority of them there was displacement of the bone inwards as well as backwards. In these cases the diagnosis was easy as the bone formed a decided prominence which could be felt under the tendo Achillis—the body of the astragalus being thrown to the inner side of the tendo Achillis. Hamilton stated that it had been found twisted in almost every shape, turned upon its edges and turned upon its axis in various ways. Another point Hamilton stated was that in these cases the foot was turned rather inwards, as was the case in this instance. It was stated usually that the

dorsum of the foot was shortened, but eight cases are not enough to establish an absolute fixed rule in regard to these cases. He had always believed that there was a carrying back of the tibia and fibula and that they probably rested upon the neck of the astragalus. There might perhaps have been fracture of the neck. He did not think there had been fracture of the internal malleolus, its outline could be traced distinctly. It projected backwards and outwards and it was not possible that a portion of the internal malleolus should have been broken in and occupied the whole of the space and still left ample surface of the tibia and malleolus to account for its normal breadth. In addition to that he was confident that there was not only movement between the os calcis and the astragalus but also between the astragalus and the tibio-fibular articulation; this as a matter of course would exclude the possibility that that mass projecting back there was any portion of the tibia or an osteophyte. As to the projection in front he did not know exactly what it was; he would not say that it was not the head of the astragalus. He only felt certain of one thing, viz., that the mass projecting back was the astragalus, that it did not occupy its normal position to the os calcis or tibio-fibular articulation.

ENLARGED TESTICLE.

Dr. Prewitt presented another case which, taking into consideration the history he thought somewhat puzzling. This man declared that he had never had syphilis, yet he had an inflammation about one thumb that was certainly syphilitic in Dr. Prewitt's opinion. Both testicles were enlarged; abscesses had formed in both, and he had taken iodide of potassium to the extent of four or five drams a day at least, and so far as he could see it had made no impression on the testicles at all. He had taken also a certain amount of proto-iodide of mercury, but the doctor could not see that he had improved at all. He had taken iron also, and more or less quinine. The finger had been a long time in getting well; it had certainly all the characteristics of a syphilitic sore.

Dr. Carson said the fact that the patient had taken iodide of potassium and other anti-syphilitic remedies played very little part in the case, as we frequently see cases where those remedies have no effect upon the disease whatever.

Dr. Tuholske thought that it was a case of syphilitic testicle; did not see how it could be anything else.

Typho-Malarial Fever.

Dr. Bribach read a paper on Typho-malarial fever. Vid. p. 104.

Dr. Carson asked the doctor if he had noticed nasal hemorrhages often accompanying this trouble?

Dr. Bribach said that in the beginning epistaxis occurred, but not after the disease was fully developed.

Dr. Carson said that they had had cases in which this was a complication. One case gave considerable anxiety, as the patient bled terribly from the nose every day.

Dr. Prewitt said that, as he understood, Dr. Bribach excluded the theory of typhoid poison. Others regarded it as simply typhoid fever, and discarded the malarial attachment. He thought he reported the first case ever observed in St. Louis. He saw the case in 1876; a young lady with a temperature of 104° which continued for several days. The tongue was clean and she had nothing abnormal but this high temperature; the pulse was 80; afterwards the temperature became somewhat lower. About that time he asked Dr. Montgomery to see the case with him. He was a physician of very large experience, and he said he had never seen anything like it in his life. He spoke to others, and none of them had heard of such a case. He saw several other cases subsequently before anybody else had seen such cases. He took Dr. Robinson to see one, and he said he had never seen such a case. It presented the same type. He didn't see a case for some time afterwards that was accompanied with hemorrhage, but he had seen several cases since where hemorrhage was very marked; one case where there was no hemorrage of the stomach and bowels, and the patient died. He did not believe that the disease was typhoid fever, and it certainly was not ordinary malarial fever. It seemed to him when he saw these cases that it was something entirely unusual, something which was not mentioned in the works.

Stated meeting, June 30, Dr. G. A. Moses in the chair.

Foreign Bodies in the Nose.

Dr. C. A. Todd presented two specimens of rhinoliths having as nuclei foreign bodies which had been introduced long before. In one case the nucleus was a small screw; in the other it was a small mass of paper pulp. The patient, in the latter case, was a young

lady, aged nineteen, who had long suffered from catarrhal symptoms, which disappeared rapidly after the removal of the foreign body.

UNUNITED FRACTURES.

Dr. Carson brought before the society a patient whom he had mentioned at a previous meeting, being one who had suffered from a compound comminuted fracture above the elbow. There had been no union of the fragments of bone. Dr. Carson cut down upon the site of fracture, found ligamentous union; broke up the adhesions; with dentist's engine and drill specially prepared he made holes in both parts and united them with ivory pegs. Last Saturday he had made the same operation upon another patient. On cutting down upon the site of injury, he found a perfect ball and socket joint formed between the fragments. He was obliged to chisel off the upper part of the lower fragment, as the fracture was so near the joint that it was impossible to turn it out of the incision. Having freshened both ends of bone he drilled and inserted ivory pegs, as in the other case.

FRACTURE OF PATELLA.

Dr. Holland brought before the society a patient, who, Jan. 14, last, was wheeling a truck, slipped and fell, and fractured his patella. Three months later, when he came under Dr. H's care, the result was very unsatisfactory, the two pieces of bone being separated a full finger's breadth. Dr. Holland operated April 2. He cut down upon the patella, and dissected off all the ligamentous tissue. Profuse bleeding occurred, and nearly an hour was spent in arresting this. He then drilled through both pieces of bone, and brought the pieces into close apposition with a double silver wire, turning down the end of the wire into the groove between the pieces of bone. The wound was then closed and an antiseptic dressing applied. Five days afterwards he opened the dressing: union was not complete, and afterwards there was some inflammation and suppuration in the line of incision. The leg was kept upon a splint for seven weeks. Now he is at work, and stands sometimes nearly all day. He still walks stiff legged. He has not regained muscular power. The two fragments are closely apposed. At the two edges it is easy to discover the site of fracture, but in the middle the surface is so smooth that the touch with difficulty

detects the line. Dr. Holland was inclined to think there was bony union.

Dr. Carson thought there was movement between the two fragments, and that the union was ligamentous in character though very close and giving a very satisfactory result.

Dr. Dean recalled the case of a man who had sustained many severe injuries, and among others a fracture of the patella. The man was in the hospital for several weeks and finally died. As the case was a coroner's case Dr. Dean did not make a thorough post-mortem, but found the fragments of the patella united by ligamentons trabeculæ, though there had been no efforts at union of a fracture of the femur.

Dermoid Cyst.

Dr. Tuholske presented a specimen consisting of a large dermoid cyst. Twenty months ago he had been consulted by a lady with regard to her daughter, then about fourteen years of age. The family had lived in Memphis. The girl had always been apparently healthy and stout, with an excessive development of adipose tissue. After an attack of yellow fever this excess of adipose diminished but the belly did not decrease proportionately. Having moved to St. Louis they thought at first that the climate did not agree with her, but it became apparent after a time that there was an abnormal swelling, some morbid growth in the abdomen. The girl had menstruated three or four times without inconvenience, and there was no suffering from the tumor, which was found on examination to extend from the pelvis to the border of the ribs on the left side. The diagnosis was difficult, and was not made until after repeated examinations, and after watching the patient for some weeks. After a time he was able to exclude all forms of morbid growth except a growth from the ovary or from the omentum or mesentery, and finally all but the first of these. The tumor was somewhat irregular in shape; the upper part was globular and resembled a huge sausage. There was no sensation of fluctuation. The uterus was normal in size and position, perhaps a little anteflexed. The growth was very slow, indeed. Taking everything into consideration the doctor thought that it was probably a dermoid cyst.

The patient had fair health and at first opposed the operation, and the doctor did not urge it upon her. After about a year and a

half, however, she became anxious to be relieved from the burden. During all this time she had menstruated regularly and without pain.

Dr. T. told her that he would prefer to operate about ten days after the menstrual period. Six weeks ago the time had been set for the operation, but, owing to the effect of some story that she had heard, the patient declined the operation then. However, a new appointment was made, and last Saturday the operation was performed. An incision was made from umbilicus to pubis. There were no adhesions. The pedicle was broad and short and was connected with the left ovary. Considerable fluid was withdrawn by means of a Tait's trocar. Another apparent cyst was found filled with cheesy matter. No other cysts were discovered, and as the size of the tumor had not been sufficiently reduced to allow of its removal through the incision already made, this was extended several inches above the umbilicus. Even then the tumor was delivered with difficulty. While the tumor was held up he transfixed the pedicle with a double ligature, tying one-half each way, and passing another ligature around the whole for additional security. He then cut off the mass with scissors. There was a considerable escape of blood from the tumor but none of it entered the abdominal cavity. A sponge passed into Douglas' cul de sac showed that the cavity was clean, and the sponge was not applied to the peritoneum more than three times in "making the toilet." Iodoform was applied freely to margins of wound and to silk used for sutures. The wound was closed, sprinkled with iodoform, a thick layer of absorbent cotton and a bandage were applied, and in one hour and a half the patient was placed in bed. Pulse, 138, temperature, 100.5°. During the three following days the pulse had steadily diminished in frequency, and the temperature had lowered until that evening when the record was pulse 88, temperature, 98.6°. That afternoon menstruation had commenced, and the young lady stated that the flow had come just exactly on time. She had misstated to the doctor the time when she last menstruated because she wanted to have the operation performed without delay, and he had expressed a preference for operating about ten days after menstruation.

The other ovary had not appeared to be absolutely normal, being considerably larger than it should be, but as it did not seem to be actually diseased, Dr. T. had left it in situ, thinking that the

organ might be enlarged by reason of having to functionate for both. He thought it better not to unsex the young woman, and furthermore he was disposed to regard a second operation as offering less risk than the immediate removal of both ovaries.

The tumor proved to be a dermoid cyst, containing hair and bone tissue, as the doctor had diagnosticated.

Dr. Carson said that it was not unusual in cases of this operation for a discharge to appear on the third or fourth day very like to menstruation. He did not think the proximity or remoteness of menstruation had much effect upon the success of the operation, though he would a little rather operate soon after the cessation of menstruation. Sometimes there was a slight elevation of temperature or gastric disturbance which disappeared on the appearance of this discharge. In one case he had removed both ovaries from a young woman who had since married and menstruated regularly and lives happily with her husband though, of course, they had no children.

CHILD-BEARING AFTER DOUBLE OVARIOTOMY.

Dr. Engelmann then remarked that even that was not impossible. He himself had recently received a photograph from one of his patients of a robust healthy baby, born five years after a double ovariotomy. One ovary was completely degenerated, a most peculiar colloid tumor, shaped almost precisely like an orange watermelon. The other ovary contained a cyst of the size of an orange. The first ovary was, unquestionably, all removed. There was a bare possibility that some cells of ovarian structure were left when the second ovary with its cyst was removed. He could see no other explanation of the subsequent phemonena. The patient made a good recovery. At about three months after the operation she began to menstruate, and continued to do so regularly. He had assured her that it was impossible for her to conceive, but after five years she had not only conceived, but had borne a living child.

With regard to another patient he had been unable to satisfy himself whether she really menstruated or not, having ascertained that she certainly did stimulate a sanguineous flow at times by mechanical means. He does not believe that double ovariotomy causes a noticeably greater shock than single ovariotomy, unless there be numerous adhesions. He had, however, noticed a peculiar effect almost identical with collapse, when ligating the pedicle in

normal ovariotomy. A notable depression of the pulse invariably occurs. He had learned from Dr. Hodgen that the same phenomenon occurs in ligating the spermatic cord before the removal of a testicle. Though he prefers to operate soon after cessation of menses he regards the flow as being of disadvantage only as a source of sepsis. A discharge simulating menstruation occurs after any grave operation upon the pelvic viscera. It may perhaps have some advantage in reducing congestion.

HYPERTROPHY OF OVARY.

Dr. Bryson did not think the increased size of the ovary could be explained by the fact that the other ovary did not functionate. Certainly there was no such fact to be observed in the testicles. They were entirely different from the kidneys in this respect. He regarded the testes as certainly quite as active organs generally as the ovaries. Great activity of the testes, he said, had a tendency to cause atrophy.

IODOFORM.

He would like to know in regard to the free use of iodoform without toxic effects. Four years ago he was treating an irritable ulcer of the anus. He had incised and stretched the sphincter. The external portion had not healed as he wished, and he had sprinkled on some iodoform, probably not more than two grains. In two hours there were profound symptoms of iodism, coryza, sneezing, eyes streaming, mucous membrane of nose and fauces injected and swollen so that nasal respiration was interfered with. There was also profound nervous prostration, all of which he considered syptoms of iodine poisoning.

Dr. Hardaway referred to the iodoform eruption described by Neisser, of Breslau, a sort of acute dermatitis not at all like the usual iodine eruption. One peculiar fact is that in no case has the internal administration of iodoform been observed to produce such an effect.

Dr. Engelmann said that he had used it freely in the abdominal cavity without any toxic effect. In using it in the vagina he had found that certain women had a special susceptibility to this agent. He had seen a small quantity applied in the vagina produce notable depression of pulse, nausea and nervous prostration, nothing approaching what is ordinarily understood by iodine poisoning. He had removed a vulvo-vaginal gland, filled the cavity with iodoform

and sewed it up without any toxic effect being caused. He had found, moreover, that a tolerence of the drug may be established in those who cannot use it at all at first.

Dr. Carson had seen one case of profound poisoning from iodoform in the person of a professor in the State University who had come here to have a large tumor removed from his side. Iodoform was applied after the growth had been removed, and there resulted extreme nervous depression, nausea and tremor. His life was almost despaired of, and it was a long time before the symptoms disappeared.

Dr. Holland said that he had a gynecological patient in whom on two different occasions the applications of iodine to the cervix uteri had caused faintness, pallor, nausea, etc., so that she had been obliged to stay in bed the following day.

Dr. Tuholske said that he had used iodoform in a great many cases and had personally seen only one case of toxic effect produced. That was a case of fistula, in which tubercular masses had formed. These were scraped off and iodoform was sprinkled over the whole surface. Great depression followed with mental hebetude. In this case the patient had an idiosyncrasy against iodoform. He himself used it freely but never in any considerable quantity, probably not more than a scruple in the abdominal cavity.

Dr. Moses called attention to the fact that there is no complementary action between the two ovaries, or the two testes as between the kidneys.

TYPHO-MALARIAL FEVER.

Dr. Bribach spoke in continuation of the discussion upon his paper read at the last meeting. He had noticed that some of the authors are disposed to ignore the malarial element in these fevers. He himself was fully convinced that malarial influence constitutes a part of the etiological factors.

Dr. Engelmann had observed a class of symptoms associated with uterine disease analogous to malarial disease, yet not amenable to antimalarial treatment. He had called attention to the subject at the meeting of the International Medical Congress at Copenhagen, and had found his experience confirmed in that of those physicians who practise in countries where malarial influences abound, while those who are differently located have no such experience.

Dr. Homan referred to the report mentioned by Dr. Bribach

in his paper, and which was published in the COURIER OF MEDICINE for February, 1881. He himself prepared the circular which was sent out by the Board of Health to the physicians of the city, and he formulated the results and prepared the report which was presented by the committee. The conclusion reached, was, that the disease studied was a "modified typhoid fever."

Dr. F. A. Glasgow cited the cases of three sisters who had been living in the same room. Two of them had unmistakable, fully developed typhoid fever: the other had a continued fever with none of the enteric or cutaneous manifestations of typhoid.

Dr. Briggs said, that when a student in Boston, he had had good opportunities for studying unmitigated typhoid fever. Later in Georgia and Florida, it had seemed to him that malarial influences seemed to give a turn to all diseases. The cases of fever which he had seen in St. Louis, seemed to be in some degree masked, as regards the invasion. The typhoid fever seemed to be concealed under malarial influences.

Dr. Bribach regarded the disease, under consideration, as a distinct type—not typhoid. The onset is sudden, the temperature 102°—104°, almost continuously; there is less diurnal variation, no enteric symptoms nor any abdominal eruptions. He regarded it as a distinct type of modified malarial fever. He thought the number of cases had increased materially during the last two or three years.

OVERFEEDING VS. STINTED FEEDING.—Moreover, it was evidently not intended that the quantity of food should be accurately adjusted to the needs of the economy. To do this is impossible, and therefore it is necessary to elect between the risk of taking either more or less food than is actually required. Which is to be preferred? Undoubtedly it is vastly better to incur the risk of taking too much than that of taking too little. Nature provides for a redundancy, but there is no provision against a persistent deficiency. *Ex nihilo nihil fit.—Jno. S. Billings in Pepper's System of Medicine.*

HEALTHY HOMES.—The majority of people in our large cities under existing conditions cannot afford to have healthy houses, and the great causes of the excessive mortality and brevity of life in all such cities are poverty and overcrowding, the latter resulting from the former.—*Jno. S. Billings in Pepper's System of Medicine.*

FOREIGN CORRESPONDENCE.

LONDON LETTER.

British Medical Association.—Cardiff.—Cathedral.—Palace.—Address.—Qualifications for Practice.—Different Grades.—Apothecaries.—The Title "Dr."—Foreign Degrees.—Cholera in Spain.—Cholera Inoculation.—Hospital for Paralysis and Epilepsy.

London, July, 1885.

The Annual Meeting of the British Medical Association this year is to be held at Cardiff in South Wales. Cardiff is a town which has rapidly increased during the last twenty or thirty years, chiefly on account of its large smelting works and also from the fact of its possessing some of the finest docks in the kingdom. The docks are the property of the Marquis of Bute who also owns a large amount of property and extensive iron works in the vicinity of the town. The noble Marquis will entertain the members of the Association visiting Cardiff during the meeting and allow them to inspect his iron works at Dowlais, and a special train will be provided for their convenience. It is often our good fortune to have with us at these annual meetings several of the representatives of our profession in America, and it is a great satisfaction to us to be able to show them some of the most interesting features of the old country. From Cardiff many most interesting points can be reached, such as Tintern Abbey and Raglan Castle, which are among the most picturesque ruins in Wales. Then there is Glastonbury Abbey where it is said, lie the remains of King Alfred and his Queen Guinever, and also the remains of Joseph of Arimathea; but how his body got to Glastonbury it is difficult to say. In the gardens around the abbey grows one of the

oldest holy-thorn trees, supposed to have been a graft from the staff of St. Joseph which sprouted when thrust into the ground and ever afterwards retained the power of flowering at Christmas. There is also Wells Cathedral with its noble Gothic "facade," on the west front, which is especially interesting on account of its sculpturing, containing at least 300 statues; the ruined Bishop's Palace, and the old castle of Caerphilly one of the largest and grandest old ruins in the kingdom. The intellectual treat to be provided at Cardiff will also be of a most interesting description. There is to be an address on Therapeutics by Dr. Roberts, of Manchester; an address on Surgery by Mr. John Marshall, late President of the Royal College of Surgeons of England; and an address on Public Medicine by Mr. Thos. Dyke, Medical Officer of Health for Merthyr Tydvil. In the section for medicine a discussion is to take place on "The Clinical Aspect of Glycosuria" introduced by Dr. Pavy of Guy's Hospital, and on "The Treatment of Acute Rheumatism" introduced by Dr. Bristowe of St. Thomas's Hospital. The President of the Association for the year is to be Dr. Edwards, of Cardiff, Physician to the Glamorgan and Monmouth Infirmary.

In many of the other sections subjects of great interest are put down for consideration and discussion, such as, The Question of Operative Interference in Intestinal Obstruction, and Bladder Tumors, their Diagnosis and Treatment, in the surgical section; The Proper Sphere of Constitutional and Topical Treatment in Certain Forms of Uterine Disease, in the Section of Obstetric Medicine; The Treatment of Maniacal Excitement, Lunacy Legislation, Marriages of Consanguinity in Relation to Unsoundness of Mind, and Suicidal Insanity, in the Section of Psychology. Numerous papers on general subjects of medical interest have also been promised. Therefore from a scientific point of view there is every reason to believe that the forthcoming meeting will be a most useful and memorable one.

It may be interesting to the readers of the "COURIER" to know that there are in Great Britain and Ireland more than sixty different qualifications entitling a man to practice medicine or surgery. Most of these are what are called double qualifications, that is, entitling a man to practise both medicine and surgery. Some few still qualify only in one branch, and most are considered to apply to one branch rather than to the other. For example, all qualifications given by the Colleges of Surgeons are looked upon more as

surgical qualifications, although the holders may generally by law practise medicine as well. But it is the usual habit with medical men to hold two qualifications, one from a recognized medical corporation and the other from one purely surgical. The holders of these two qualifications call themselves "doubly qualified." As a matter of fact many men hold four or five different qualifications as these qualifications possess different values, and are accordingly held in high or low estimation in the profession. The general public cannot as a rule distinguish the subtle differences accorded to these diplomas by medical men, and a man is considered a doctor if he is qualified; the only distinction the people can recognize is between the holder of an ordinary diploma from a corporation and one possessing an university degree.

Bachelors and Doctors of Medicine of Oxford, Cambridge and London, at the present time, can only prescribe medicines; they cannot practice surgery, pharmacy, or midwifery, without holding some other registrable qualification which entitles them to do so. Members of the Royal College of Physicians of London cannot compound medicines for their own patients, or enter into partnership, whatever other qualifications they may hold. Such qualifications as F. F. P. S. Glas., and F. K. Q. C. P., Irel., want materially to be raised in standard before their holders can be classed in the first grade. But the public, in the long run, will be the arbiters of the position in which a man is placed—they will not call a Fellow of the Faculty of Physicians and Surgeons of Glasgow into consultation at a fee of two guineas, when they can get a Fellow of the Royal College of Surgeons of England or an M. D. of Oxford for the same money; but the position accorded to any practitioner by the profession is some guide to the public in forming their decision.

It is no use ignoring the fact that the holders of the several degrees and diplomas have a different status in the profession; and different grades in the profession are necessary to meet the various demands of the public. It would be as well to acknowledge this necessity, instead of trying to level up the whole profession, as has been attempted of late years. In a work recently published, referring to medical fees, I noticed this amusing paragraph: "All men engaged in the medical profession are supposed to be equal in point of skill, and therefore entitled to charge alike." This statement is ridiculous. There is a demand for men who will do cheap

practice, and the demand ought to be supplied. It is ungenerous of those in a better position to run down a medical man for seeing and prescribing for a patient for a low fee, when the patient perhaps cannot pay more; and such practices in which visits are paid for very low fees are remunerative when they are situated in the midst of densely populated but poor neighborhoods. Our false pride in this respect is what we have chiefly to thank for driving the multitudes to the chemists and the out-patient departments of our hospitals. The apothecaries should be encouraged to keep open surgeries, as their brethren at present do in Ireland, and supply that want to the lower classes which is now so much met by chemists and other unqualified persons.

The old class of apothecaries, which is now fast dying out in the south of England, was a most useful body of men. To quote from a very able paper on Medical Reform, by Mr. John Wood, Surgeon to King's College Hospital: "The number of medical practitioners must be kept up to the public demand, or an increase in the counter practice of chemists, and the competition of quacks and unlicensed practitioner will inevitably ensue," and to quote from another gentleman who has written on the subject, "It is quite clear that our highly educated and aspiring young practitioners, who have had the means of spending five or six years at the hospitals and schools in acquiring their medical knowledge, will not descend to accept such fees as these classes"—he is speaking of the lower classes—"are able to afford; and consequently they will be driven to consult quacks and prescribing chemists, or to sacrifice their independence by availing themselves of medical charity. Now, to drive such a large section of the community to spend their money outside the pale of the profession, is simply to deprive the profession of a very large amount of income, which would, if we gave the opportunity, flow naturally into its coffers."

For these reasons the standard of knowledge required by the Conjoint Board, which the new medical act proposes to establish, should be the minimum amount on which an apothecary might practice; men who would keep open surgeries where a tooth would be pulled out, a splinter removed, or an abscess opened for an appropriate small fee, or where a mother might have some teething powders for her baby, or a mixture for the diarrhea, where, in short, all people might have their petty ailments dealt

with in a satisfactory manner and in the cheapest and readiest method. These surgeries would be similar to the out-patient room of the hospital or dispensary, only the patients retaining their independence on retiring, and leaving something behind them for the doctor to live upon. The apothecary would be capable of treating all ordinary ailments, and would have those in the higher grades of the profession to fall back upon in case of need, calling them into consultation when their patients could pay the fee for such attendance, and in default could recommend them for admission into the hospitals. In the above paragraph, I have quoted largely from a paper read by Dr. Bowles, of Folkestone, before the Southeastern Branch of the British Medical Association.

Such divisions of the profession into apothecaries, licentiates, and physicians, have existed in this country for centuries and have been useful; their members have afforded medical aid to different sections of the public, according to their position in society, and a recognition of such degrees among medical men, however informal it may be, would tend to counteract the present tendency of endeavoring to level up the whole profession, thereby removing the services of qualified men far beyond the reach of a large number of the public, who can, in consequence, only obtain such assistance gratuitously by means of some charity. Such a classification as I have referred to would assist in defining the class of practice taken up by certain members of the profession, and tend to prevent their encroaching upon the province assumed by others, thereby reducing the amount of professional jealousy and bickering now so abundant. It would also justify and afford an additional reason for our objecting to unscrupulous men, who only hold licenses to practice, passing themselves off as medical graduates by the assumption of the title of "Dr.," thereby misleading the public. If certain grades and corresponding appropriate scales of fees were to some extent recognized by the profession, it would help its members in deciding the charges they might claim, and the amount to be awarded in cases brought forward for decision in courts of law. It would also act as a guide to county court judges in arriving at a decision as to the justice of charges claimed by a medical man holding a certain qualification. In fact, it would afford a sort of basis, both to the public and the profession, for forming a conclusion as to a medical man's position in the profession. By the amended Medical Act it would be illegal for any practitioner to assume the

title of "Dr." without an university degree. The general Medical Council in cases of infringment of the act, would have to prosecute, as it is an attempt to mislead the public.

The profession at large views with disfavor the holders of foreign degrees, and rightly so. It is another attempt to impose upon the public. The foreign M.D.'s trade upon the reputation the title of 'Dr.' has acquired in this country, not the reputation the foreign university has acquired; for holders of such degrees seldom append the name of the university after their M. D.; for many of these foreign universities have no reputation at all. The whole object of the impending legislation in medical matters would be frustrated if foreign degrees were made registrable in this country, as no conjoint board or general medical council could have the slightest control or influence over the foreign examinations, and it would be manifestly unjust if a certain standard were imposed and recognized for British university degrees, and persons allowed at the same time to obtain foreign titles on perhaps much easier terms. The complaint at present and one of the objects for the new bill, is that persons are able to become medical men at some places on easier terms than is thought expedient.

The excuses brought forward for those who take foreign degrees are generally as follows: A young medical man, after he has qualified, finds or thinks that his position in the profession would be much improved if he could call himself "Dr." For the London university degree he has to pass matriculation and preliminary scientific examinations, both including non-professional subjects, subjects he has cast aside for some years; most of the other universities require a residence in town for a certain specified time, in addition to more or less stringent examinations; he has not the time or money to devote to either, so he decides that he is debarred from obtaining the degree in his own country, and therefore follows the example of other men before him, and seeks the degree from a foreign university.

There must be hundreds of men in the profession, general practitioners, who, from their culture and knowledge, or who, under different circumstances, could have obtained a British "M. D." degree, and have conferred lustre and honor upon the university granting it. But circumstances ordained it otherwise, and they conscientiously fill the posts and perform the duties which devolve upon them, and do not seek a fictitious title from a foreign source.

The title of "Dr." improves a man's position in the medical profession, because its acquisition is supposed to entail the conditions under which it is granted in this country, the extra time spent in study, the social advantages of a university training, and the harder examinations passed. But the holder of a foreign degree obtains the title without conforming to the conditions which have made it valuable, and is therefore sailing under false colors. If the distinction he gained by passing an examination at a foreign university was called by some other name, he would not seek it. It may be very hard that a man whose abilities are equal and perhaps superior to many graduates, should be debarred by circumstances from obtaining an M. D. degree in an honorable manner, but it is his circumstances of which he has to complain.

He may think he is possessed of the requisite professional knowledge for the degree, and if only allowed to go in for the professional examinations, he could pass them; but here again a man's own opinion of himself cannot be accepted. We might, many of us, think we are qualified for the peerage; but that would be no excuse for our buying foreign titles and flaunting them in this country. There is no doubt that the examinations imposed by some of the foreign universities are most searching; but we have no guarantee that they will remain so; and some, we know, are notoriously superficial. But, of course, when a medical man has taken the false step of obtaining a foreign degree, he loses no opportunity for informing the world of the stringent character of the examination he has passed.

The cholera is now again raging in Europe. There were over 800 deaths in Spain on July 4th, for several days they had over 600 deaths a day. During the epidemic last year Italy was the country which suffered most, but I do not think the number of deaths in one day ever exceeded 500. On the 9th of September last year the deaths in Naples were 493; and from the end of August to about the middle of October the number exceeded 6,200. The University of Cambridge has sent out to Spain Dr. C. S. Sherrington to inquire into the practice of inoculation as carried out by Dr. Ferran. Most contradictory rumors are afloat in this country as to the efficacy of the so-called vaccination, and as to the reliability that can be placed on Dr. Ferran. The French consul at Valencia states that Dr. Ferran has refused to allow Dr. Brouardel, the French scientist, to examine any of the samples of cholera lymph or to

assist at his inoculation experiments. Under these circumstances Dr. Brouardel intends to return at once to France. It is to be hoped that a better reception awaits our countryman. The *British Medical Journal* says that on June 25th, Dr. Ferran received permission to continue his inoculations in the infected provinces. On the same day he began in Valencia city, and from the awful panic prevailing there hundreds of all classes flocked to him, every one paying two dollars as a minimum fee. We ought soon to be in a position to determine the value of inoculation.

July 4, the Prince of Wales opened a new hospital, which had been built as a memorial to his brother, the late Duke of Albany, on the site of the former National Hospital for Paralysis and Epilepsy. The new building occupies about an acre of ground, and is one of the most complete institutions of its kind in England. It is built in the Queen Anne style of red brick and terra-cotta, on what is called the pavilion principle. It has fireproof floors and staircases, teak flooring to the wards and day-rooms, encaustic and glazed tiles, asphalt and marble mosaic paving, hydraulic lifts, and other modern accessories. The hospital consists of two ranges of buildings each composed of a central structure and two wings, with a central and smaller block in the rear in which are situated the out-patient rooms. The hospital is to hold about 160 beds and cots. The staff of the National Epileptic Hospital includes several physicians whose names are well known in relation to nervous diseases, such as, Hughlings Jackson, Gowers, Ferrier, Radcliffe and Buzzard. E. V. A.

ESTHETICS IN NURSING.—The esthetics of the sick room have received an impulse from Mr. Lawson Tait, who is said not to accept homely women as nurses for his patients. If Dr. Tait's specialty were concerned with the male sex, the wisdom of his selection would be even more apparent. Mrs. Stowe makes one of her shrewd (male) characters say that a pretty face in the singers' seats is a means of grace, and the same philosophy seems to be applicable to what is under the nurse's cap.—*Bost. M. & S. J.*, July 30.

THE MORTALITY AMONG PHYSICIANS under the age of thirty is higher than that of any other profession during the same period of life.

COMMUNICATIONS.

TRANSVERSE PRESENTATION—VERSION.

Pestigo, Wisconsin. June 21, 1885.

Editor Courier:

I was called Sunday, May 31, 5 A. M., to see Mrs. S. multipara in labor. When I arrived I made examination, and found a "transverse posterior presentation." Head in left iliac fossa, left hand at vulva, also funis. Midwife had ruptured membranes two hours before. Pains so strong that chloroform had to be administered before version could be accomplished; child had convulsive motion after I was called, and before version was attempted. I considered podalic version advisable, and with difficulty I obtained both feet, then by bimanual version the arm and cord returned and body of child was born. Had trouble with shoulders; but brought down the right arm and at last the left. Head seemed to hang on brim of pelvis; could not reach mouth; it finally came down suddenly; child was dead, weight eleven pounds. Placenta delivered naturally. Child delivered in one-half hour from time I last felt motion. Was child dead before version or not?

Wm. D. Lewis, M. D.

ELECTRICITY AS A GALACTAGOGUE.

New Richmond, Wis., July 15, 1885.

Editor Courier.—In view of the fact that the action of all galactagogues now in general use is very uncertain, and in response to the invitation of the editor of the Courier to send in experience in regard to the use of electricity as a promoter of the lacteal secretion, I have to say: First, that my experience is as yet quite limited, but so far as it goes, proves to my mind that it is far more

certain in its results than any of the much vaunted nostrums found in the drug shops. The subject is discussed at some length in Dr. Routh's Treatise on Infant Feeding (*Wood's Library* for 1879, beginning on page 78.)

Dr. Skinner, of Liverpool, gives his manner of application with report of six successes. My own experience has not been quite so markedly successful, although very satisfactory. In two or three cases little or no benefit was derived from the agent, while in three or four others the results obtained were quite remarkable.

In my first case, a primipara, the secretion was very scanty, and any attempt of the child to nurse caused the most excruciating pain in the nipple. This pain was piercing in character and seemed to penetrate clear through to the back. A single sitting of fifteen minutes entirely relieved the pain, and it never returned. The second application was followed by an increased secretion, and a third secured a very liberal supply, entirely sufficient for the needs of the child until nearly a year old.

The second case was in the same subject, and followed by the same happy result.

Case 3 was one in which the secretion, scanty at first, was entirely stopped by the illness of the child, so that it could not nurse for a week or more; this with the anxiety of the mother caused the entire suspension of the function. In this case quite a number of sittings were required, extending over a period of two or three weeks, daily at first, then every second day, resulting in an abundant flow of milk.

I used in some of my cases Kidder's crank machine, and in others the Gaiffé battery.

Dr. Skinner records six cases in which only one or two applications were required to bring about a copious flow of milk.

In one of my cases the woman was as dry (to use her own expression) "as a farrow hen." In this case we got no milk, but the pain in the breasts was effectually cured.

F. W. EPLEY, M. D.

CORRECTION.—Dr. John W. Trader desires to make a correction in the note with reference to "cholera microbes" p. 93, July COURIER. It was Dr. B. F. Wilson, of Salisbury, instead of Dr. Catlett, of St. Joseph, who made the remark there quoted with reference to the food of the microbes.

NOTES AND ITEMS.

The American Ophthalmological Society held its twenty-first annual session at the Pequot House, New London, Conn., July 15 and 16, 1885. The time was well filled with the reading and discussion of papers and cases.

The officers for the current year are the following:

President, Dr. W. F. Norris, Philadelphia; Vice-President, Dr. Hasket Derby, Boston; Secretary and Treasurer, Dr. O. F. Wadsworth, Boston; Corresponding Secretary, Dr. J. S. Prout, Brooklyn. The next meeting will be held in New London, on the third Wednesday in July, 1886.

American Otological Society held its eighteenth annual session in New London, Conn., July 14, 1885, Dr. C. H. Burnett, of Philadelphia, presiding. A number of valuable papers were read and discussed.

The following officers were elected for the coming year:

President, Dr. J. S. Prout; Vice-President, Dr. S. Sexton; Secretary and Treasurer, Dr. J. J. B. Vermyne; Committee on Publication, Drs. Vermyne, Blake and J. O. Green; Committee on Membership, Dr. Carmalt, Kipp and Theobald.

Drugs and Medicines of North America.—The last number of this excellent work contains the completion of the article on Hydrastic Canadensis and commences one on Coptis Trifolia (Gold Thread).

The Library of the College of Physicians and Surgeons of Philadelphia is, next to that of the surgeon-general of the United States Army, the largest and finest medical library in the United States, containing over thirty-three thousand volumes and twelve thousand pamphlets, and having on the tables of its reading room over two hundred and fifty current medical journals. In 1863,

when the college took possession of the present fire-proof building, its library numbered four thousand volumes. In 1866 the college first made its library easy of access by appointing a paid librarian to be in astendance daily. The average regular addition to the library is considerably over a hundred volumes a month. The library and reading room are open, not only to members of the college, but to any person who comes properly recommended.—*Jour. of Am. Med. Assoc.*, May 30, '85.

REPORT ON CHOLERA.—In a paper read by J. E. Baker, before the Medical Society of the County of Kings, April 21, there is an excellent summary of what is known now concerning cholera. The conclusions which he reaches are as follows:

1. That cholera occurs mainly in great epidemics, starting in India and moving in a westerly direction, reaching America usually about a year after its appearance in Europe.

2. That the fourth great epidemic has reached Europe.

3. That the identity of the comma bacillus, as the causative agent of cholera, is not as yet accepted by all scientific investigators.

4. That the manner of transportation and diffusion is generally by means of rags and polluted clothing, the latter being worn usually by emigrants.

5. That the incubation period is very short, the onset of the disease very sudden and the prostration following quite rapid.

6. That filth in all its forms is a necessary concomitant to the disease. Filth may exist without cholera, but cholera seldom prevails without filth.

7. That the disease can be arrested and completely stamped out by efficient and vigorous sanitation, as has been demonstrated beyond all question.

8. That in addition to the extreme importance of efficient sanitation is the absolute necessity of the prompt attention to immediate treatment by the method of house-to house visitation within the cholera limits, and, if need be, the instant removal of patients to hospital accommodations.—*N. Y. Med. Jour., June 6, 1885.*

SODA AND MINERAL WATERS.—The Missouri State Board of Health has recently issued the following circular:

Office Board of Health of Missouri, St. Louis, July 25, 1885.—To

the Public, and Local Boards of Health: In view of the often unknown or suspicious sources from which is drawn the water supply used by manufacturers of various kinds of mineral or other artificial waters sold in this state, and of the reasonable probability that soda water as dispensed through fountains, and mineral carbonated waters generally, may constitute an insidious medium for the causation of disease in unsuspecting consumers of such waters, the state board of health desires to hereby caution the public as to the possible danger to health in this direction, and to urge upon retail dealers and dispensers of such waters that they will demand of all such manufacturers whose goods they handle certificates obtained from their local health authorities, and for public exhibition, officially declaring the sources from which all waters used in the manufacture or preparation of their goods are derived, together with an opinion as to the degree of wholesomeness and sanitary safety attaching to the same.

It is recommended that all local boards of health throughout the state make inquiry into this matter, and where manufacturers of the aforesaid waters fail or refuse or are unable to procure the said certificate, or whenever in the opinion of the board the water used is of unfit quality, or when its ascertained source is found liable to contamination, that they will, in the interest and for the protection of the public, make widely known such failure or refusal or detrimental condition of manufacture, to the end that such action by them may justly operate to lay goods produced amidst questionable sanitary surroundings under serious suspicion and discredit in a public health sense, and render their sale difficult for the purpose intended.

By the executive committee,

Geo. Homan, M. D., Secretary.

At the meeting of the St. Louis Board of Health, July 27, on motion of Dr. E. M. Nelson, action was taken in accordance with the suggestion of the circular; but no report has yet been made.

Fall of Nearly Two Hundred and Fifty Feet.—In the *Bristol Medico-Chirurgical Journal* for June is the account of a girl twenty-two years old who attempted to commit suicide by throwing herself from the Clifton suspension bridge which is about two hundred and fifty feet above the river at low water. The girl has no recollection of what occurred after reaching the bridge,

though she left home with the purpose of destroying herself in this way.

There were severe bruises of the buttocks and the back of the thighs, and the manubrium of the sternum was dislocated forward. Respiration was feeble and she vomited fluid streaked with blood. Albumen and blood casts appeared in the urine and there was restless delirium for several days.

In less than three weeks the girl had so far recovered as to be able to walk without pain. The reporter knows of no other case of survival after a fall from a height of one hundred and fifty feet. Probably the woman's life was saved by the parachute action of the clothing.

DETERMINATION OF PERSONAL IDENTITY.—A writer in the *British Medical Journal*, for July 18, suggests as a means of determining questions of personal identity, the comparison of photographs of the claimant with those known to be likenesses of the real party. He claims that by using the diameter of the iris as a unit of measurement for the details of the face it is possible to identify individuals by their photographs with very great certainty.

PUBLISHERS' NOTICE.

We are sorry that our necessities are such as to make it necessary to call on our subscribers to pay their subscriptions. While we are satisfied that our patrons do not intentionally neglect to pay; the sum being so small, it is treated as a matter of but little importance, consequently neglected; while with us it is by receiving those small sums promptly that we are able to continue to publish the journals as we do, viz: The COURIER, Review, Annals of Surgery, American Journal of Ophthalmology and Archives of Dentistry.

If you have not already paid your subscription up to and including 1885, you will kindly remit the amount due at once.

We dislike much to make drafts for the amount, but if not paid at once we shall be compelled to do so. Statements have sometime since been rendered for amounts due, with notice on same that draft would be made, which we trust none of our patrons will take offense at, but will pay draft on presentation, and continue their patronage.

ST. LOUIS
COURIER OF MEDICINE.

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ORIGINAL ARTICLES.

REPORT ON ORTHOPEDIC SURGERY.

BY A. J. STEELE, M. D., St. Louis.

[*Read before the Missouri State Medical Society, St. Joseph, May* 12, 1885.]

CLUB-FOOT.

In the young infant the treatment is most advantageously carried out by bringing the foot into good position with the employment of strong manual force, and there retaining it by the application of a plaster of Paris bandage, extending to above the knee, otherwise it may slip off, for the infants foot is dumpy—without character. A thin piece of board or shingle, cut larger than the sole of the foot, and of correct shape, should be fastened to the sole by the early turns of the bandage. The board may then be used as a lever by which to hold the foot in improved position while the gypsum bandage is being further applied. A thin piece of hoop-iron or strip of tin may be incorporated into the bandage, being bent around the instep of the foot and extending up the outside of the leg. This greatly fortifies the plaster. The foot, thus held until the plaster hardens,

remains in good position, the shortened ligaments and tendons stretching, and the lengthened ones shortening. A snug fitting stocking or flannel bandage should encircle the parts previous to the application of the plaster bandage. In ten or fourteen days the appliance should be cut open and removed, and the foot forced into still more improved position, the parts stretched and moulded, and the splint reapplied, or better, a new one be put on. And thus the bandage may be renewed from time to time as is found necessary. Later on a retentive shoe should be worn, and still later, a walking shoe.

In older subjects and neglected cases it will be found necessary to precede the plaster treatment by tenotomy, usually of the tendo Achillis and plantar tissues. In aggravated cases where manual force, even under anesthesia, is insufficient to correct the deformity, mechanical power must be invoked, previous to the application of which, thorough division of the plantar tissues, subcutaneous, must be made. The successful issue of many a case turns upon the completeness of this cutting. In my own experience, not having had an opportunity of seeing, not being familiar with the machines that had been devised as *rectifiers*, I planned and had one made. It is simple and efficacious, and so arranged that three screw pads press upon the most prominent parts of the deformed foot, namely, first on the ball of great toe, and second on heel, these on the inner side; and third, on the head of the astragalus and scaphoid bones, on the outer and upper side. Under anesthesia, tenotomy having been performed, five or more minutes of continuous, increasing pressure should be made, the ligaments and shortened tissues cracking and tearing under this rectifying force, until the foot is fairly re-shaped. There is but little danger of sloughing where the pads impinge against the skin, the pressure being so brief. The foot is thus forced into more normal position, and, after the removal of the rectifier, is so held by the application of a gypsum bandage as before. In two or three weeks' time the splint is removed, the foot manipulated, and a bandage reapplied, and so on, till in time a club-foot shoe is substituted.

I call your attention to a new shoe I have devised, which be-

comes both a shoe, first, for rectification, and second, for walking. The steel sole-plate of the shoe is divided opposite the medio-tarsal joint, and the two parts connected by a ball and socket joint. The socket is made in two halves, clamps, approximated by a screw worked with a key. Thus the relation of the anterior to the posterior part of the shoe can be changed to any direction, and there held firmly by clamping the joint. Therefore the foot, well laced into the shoe, becomes a part of the latter and obedient to its possibilities. The heel being grasped with one hand, and the front of the shoe, with the other, all needed force is used to give the two a more normal relationship; thus held, an assistant tightens the clamp. From day to day the case progresses until sufficient improvement is had for walking purposes, then the joint may be left loose, movable, and rubber elastics attached externally, artificial muscles, converting the corrective into a walking shoe.

Much attention should be given, in all cases of club-foot, to developing and strengthening the muscles controlling the foot; electricity, massage, heat, active and passive motion should one and all be assiduously employed to restore power to the weakened parts. Correction of the deformity is only a part of the treatment; and it is just here that surgeons fail in making permanent cures. They operate without giving due attention to the after treatment, which is necessarily tedious.

In adult cases of club-foot but little remains in the way of rectification but to remove a portion of the tarsus; a wedge-shaped piece from the outer side, or all of the cuboid bone. Formidable operations but correct in principle and successful in practice.

Pott's Disease.

The wave of doctrine which a few years since swept over the profession, especially of our own country, to the effect that Pott's disease was strictly a local trouble, local in cause and in pathology and therefore should be in treatment, has about subsided. It, like hip-joint disease, is certainly due to a constitutional fault, call it struma if you wish, either congenital or acquired. An attack of sickness in a child, as of

measles, may induce such a condition of the system as to render it susceptible to a chronic bone trouble from a mere local injury, to which it would not have been liable previous to such illness. A markedly impaired state of the system of either parent at the time of conception, even though such impairment were due to a temporary ailment, may cause a *strumous* habit in the progeny.[1]

Struma, therefore, is not an entity; it is rather a state or condition in which, from slight traumatism an inflammation is lighted up, that tends to cause a breaking down rather than to repair. It need not then be due necessarily to a syphilitic, to a tuberculous or to a scrofulous diathesis, but to an existing systemic fault of an occult nature.

The argument that local treatment cures this trouble, *ergo*, the disease must be local, is only specious, for in our local treatment we are either directly or indirectly giving or permitting an improved general treatment. For example, place a jacket on a cripple from spinal trouble and he is both enabled to take and seeks exercise and fresh air and sunlight, constitutional remedies.

In the treatment of Pott's disease support to the spine—immobilization—is still the indication. If the inflammation is acute, recumbency is necessary, later on support can best be had by the gypsum jacket, and still later by a removable brace. I have an individual preference for leather as a material in the construction of the latter. In the mid-dorsal region and below it the jacket extending to the axilla affords the requisite support. In the upper dorsal the appliance should extend above the shoulders. In the cervical region support is best afforded by means of a leather collar, coming well down upon the shoulders and extending upwards well under the chin and occiput, and in some cases extending over the back of the head and around the forehead like a helmet.

One will, however, be guided by the requirements of an individual case, at one time a well-fitting cuirass, like a shell to the whole back with a constant supine position, at another time a

1. Dr. Mulhall, our fellow member, enunciated such doctrine in his able paper read before the Association at its present meeting.

jury-mast suspension of the head or an occipito-mental support attached to a gypsum or leather jacket.

Paralysis occurring in the progress of Pott's disease, usually in cases that have been neglected, is a complication that rights itself as the results of the inflammatory action at the part subside. It is due to pressure upon the cord or nerves—rarely by the bones but rather by the swelling or tumefaction of the soft structures, which swelling and pressure subside as the case improves under proper treatment. Any paralysis remaining after the local trouble has been subdued is best overcome by the employment of electricity, massage, etc.

Hip-Joint Disease.

Of hip-joint disease I can only emphasize what I so strongly urged at the last meeting of the Association in regard to its treatment, viz., the utmost quiet of the part from first to last. "Motion without friction" is a myth; therefore the more thoroughly we can immobilize the inflamed joint and adjacent parts the more effectually do we meet the indications for treatment. I have found this best accomplished in the earlier stages by the use of the stretcher splint (exhibited on a former occasion) and later on, the acute symptoms having subsided, by the wearing of a portable splint—a modification of Thomas's.

Abscess forming may be left to nature, unless tending to burrow, then aspirated, which relieves pressure and keeps the pus localized. These abscesses do well and subside as the original process is controlled.

Lateral Curvature of the Spine.

In *Rotary Lateral Curvature* the deformity is best evidenced by having the patient bend the spine forward. This position crowds the rotated vertebræ still more round, carrying the angles of the ribs farther back above, and the mass of loin muscles more prominent below, giving great distinctness to the one or the other. In its treatment I have not adopted the plan of some of my eastern friends, of at once applying a jacket; for it is an affection of weakened muscles, or at least of loss of antagonism of opposite spinal muscles, and to immobilize the spine

would tend still more to weaken, from non use these muscles. I rather place the body by auto-voluntary effort in improved position, while the muscles which so place and hold it are strengthened by exercise, massage and electricity. These exercises are of course special. Later on, when much improvement is attained there may be applied a removable corset, made of firm material as of sole-leather, fashioned over a plaster cast of the body when in corrected position. Methodical exercise should be continued faithfully for months, possibly years.

I am certainly no advocate of the use of steel braces, encircling bands, pressure plates, steel arms as levers moved by powerful cogs. Especially at the Royal Orthopedic Hospital, where hundreds of these cases apply annually for treatment, did I witness this practice, and received the assurance of the attending surgeon that good results were had. But I was far from being convinced or converted. The convenience of the surgeon is favored by simply ordering for the patient such a machine and from time to time screwing up the plates tighter. A daily superintendence and giving of methodical exercise is another matter, requiring judgment, time, patience. The earlier cases can be had for treatment, *i. e.*, before the bones are misshaped the better.

Curved Tibiæ.

Tibial curvatures in the child may be corrected by the application of a straight splint, a test for the use of which being a slight bending of the bone by manual force. In the older child or in very firm bones apparatus will accomplish but little, *osteotomy* being required here. Gigantic strides have been made of late years in the methods and employment of this operation. For knock-knee, bow-legs, anchylosis, deformities from rickets, it has been found extremely serviceable. The usual operation consists in weakening the bone by cutting into it with a chisel, and then breaking it, placing the limb in improved position, applying a splint, preferably gypsum, and awaiting union.

Macewen, of Glasgow, has done more than any other surgeons to perfect this operation. To witness his operations and results will convince the most incredulous that the procedure is simple, practical, safe and effective.

Anchlyosis.

In the treatment of *false anchlyosis* it were better to divide the resisting tendons before resorting to *brisement forcé*, and then not to make forcible extension of the limb, but first marked flexion and then gentle extension. The adhesions being thus thoroughly broken up and the inflammation subdued then resort may be had to persistent passive motion.

True anchylosis requires operation for obtaining more advantageous position. Osteotomy finds place here: Refracture or removal of wedge-shaped piece of bone.

At Lyons I had the pleasure of witnessing the operation of osteoclasis, accomplished by a powerful and ingenious machine, lever force being used and the bone breaking just where indicated. Though the French have reported much success in this procedure for the rectification of deformity, yet it has not become popular in other countries; osteotomy taking the preference.

Massage.

Massage, one of the lost therapeutic arts, is of late finding place in orthopedic treatment. In joint troubles, the inflammation having been subdued, massage rapidly assists resolution. In paralysis where innervation still exists and the muscular structure is not entirely destroyed, it is a valuable adjuvant to the other therapeutic agents employed.

"In highly acute arthritis of any kind attended with fever, massage would not be thought appropriate until the disease had assumed a subacute or chronic form, and the fever had abated. Then massage might be used with benefit, provided there was no solution of continuity, true anchylosis or risk of hastening absorption of inflammatory products pernicious to the system. In disease of bone or cartilage massage would be useless."[1]

The treatment of sprains by massage seems to shorten the period of recovery to one-half or one-third the time required by the old stereotyped methods. "The vast number of sprains of all degrees of severity that have recovered in from seven to

1. Graham.

nine days under massage would seem to prove either that rupture of ligaments, tendons and laceration of muscles with effusion of blood into the joint occur much less frequently than is supposed, or else are of much less serious import when treated by massage."[1]

CUSTOMS IN MIDWIFERY.

By N. M. Baskett, M. D., Moberly, Mo.

[*Read before the Moberly District Medical Association, June 16, 1885.*]

I SHALL present no paper to-day upon any one subject, but shall briefly present a few thoughts upon matters pertaining to the science of midwifery.

The more I study the subject of medicine, the more thoroughly I am convinced that the members of the medical profession are largely influenced by custom, whether that custom is founded on a correct anatomical or physiological basis, or not. The *dicta* of eminent medical men control us contrary to our own experience and judgment. White frequently passes for black and vice-versa owing to our great tendency to follow where some daring or blatant spirit will lead.

The customs of medicine, founded upon false theories, which have risen and flourished and held our profession in their spell, to finally be ignored and cast away, lie along the shores of time like sea-weed on the strand. Many still linger, and doubtless many will yet be formulated, to exert their influence for awhile, at last to be swept away and be forgotten.

The thought has often occurred to me that in obstetrics we are as much under the thraldom of custom as in any other branch of our profession. The prescribed modes of delivery which exist in this country and England are almost totally ignored in many countries. While among savage tribes, where parturition more nearly approaches the instinctive, or strictly

1. Graham.

natural processes of the lower animals, we find life produced and thriving with less difficulty than under the artificial rules which science and custom have prescribed for civilization.

The first subject I would discuss is the management of the umbilical cord, or funis, after the birth of the child. From time immemorial we have been taught to tie the cord either in one or two places. If in one, that part which remains connected with the child is directed to be ligated. What reasons are advanced for this? In the one case, it is taught as essential in order to prevent umbilical hemorrhage. In the other, I have heard none of importance, unless it be the prevention of escape of a small amount of blood from the placental end of the cord, which would add to the general nastiness of the occasion. This is really no argument in its favor, as at the close of labor things are about as nasty as they well can be. If we adopt the view of an old physician, not a member of this society, whom I know, and tie the placental end of the cord "*to prevent the mother bleeding to death through its severed extremity*," we would at least have a reason satisfactory to *ourselves* for the custom.

Unfortunately, the anatomical and physiological relations of the placenta and the mother do not warrant my old friend in taking so grave a view of a failure to tie the placental cord. The circulatory relation of mother and child in utero is one of osmosis. In fact, if we wait a few minutes after the birth of the child, before separating the cord, it will be found totally drained, and upon division but a few drops of blood will escape. The functions of placental circulation cease with the first few respirations of the child.

Now, concerning the umbilical extremity, the ligation is applied to prevent hemorrhage from the placental vessels. Occasionally umbilical hemorrhage occurs, and I have seen it persist in spite of all means applied to control it, but, as I endeavored to show in an article read before this society at its last meeting, it is due to either an acquired or congenital obstruction to the portal circulation, causing a damming of blood in the portal system and an effort of nature to relieve itself at the weakest part.

Now, what are the facts in nature? Among the larger vertebrata nature alone is trusted. The birth of the individual is a physiological process. Nature has provided for the safety of the mother and its young during and subsequent to the supreme act of parturition. The cord is severed, but neither end is ligated. The placenta, with the birth, becomes flaccid and drained; the placental circulation ceases. The valves in the umbilical veins prevent the regurgitation of blood and, consequently, umbilical hemorrhage. In a few hours they are merely white fibrous cords, no longer patent or capable of carrying the vitalizing fluid of the system.

Nor is this alone the case with animals. Many of the savage tribes depend upon nature. The savages of the New Hebrides never ligate the cord. When nature provides, art is superfluous. That which was ordained for life shall not be in us death.

I do not wish to be understood as saying that I do not ligate the cord. Unfortunately I am controlled by the slavery of custom I deprecate. I was taught to tie both extremities of the cord and invariably follow the teaching. Analogy and experience, however, teach me it is physiologically unnecessary.

I wish to consider next the support of the perineum during the latter part of the second stage of labor. When I attended college we were told that when the head of the child was distending the perineum and sweeping under the os pubis, we were to provide ourselves with a napkin and press against the perineum to prevent too rapid descent, and direct the forces of nature toward the external axis of the pelvis. In this way the head would rise up from under the arch of the pubis, and make its exit more readily to the external world. In this way labor would be facilitated and rupture of the perineum prevented.

I do not believe one word of this doctrine, for several reasons; one, again, on the grounds of analogy, cited in the animal kingdom and the lower human tribes, the process being a purely physiological one. The other, because the diameter of the child's head and the diameter of the pelvis have at all times a mutual interrelation. If the pelvis is too small and the child's head too large, pressing on the perineum will not alleviate the condition. In such a case we must rely either upon the forces

of nature to mould the child's head so as to permit its passage through the narrow space, or resort to forceps. The only cases in which I can see any benefit might result from supporting the perineum would be where the head of the child was so small and the pelvis so large as to destroy their mutual relations and permit so rapid a descent of the head as to cause it to force its way through the soft tissues, impelled by the *vis a tergo* before they were properly dilated for the act of birth.

When I first began the practice of medicine I implicitly followed my instructions. An experience of two or three years convinced me that labor was more frequently retarded than assisted by the custom. That it caused the mother to suffer more. That the parturient effort was purely physiological, each part adapted by an All-wise Power to every other, and in a healthy state the functions would be performed in a normal manner, without any adventitious aid. I can safely say that I have attended two hundred cases of labor in nine years of practice, and during this time have never had but one ruptured perineum. That is a case of a woman previously ruptured at first confinement, and subsequently operated upon; and this second rupture occurred in spite of supporting the perineum. In fact I am inclined to think the perineum is more frequently ruptured by ill-applied support than any other means. I am glad to say that these views are held by such eminent authorities as Swayne and Graily Hewitt.

We were taught that we should wait fully an hour before attempting to remove the after-birth, if it were not expelled with the child or immediately after; and I have known physicians who were in the habit of waiting much longer, providing there were adhesions existing between the placenta and the uterus. We were told never to use any extreme traction on the cord for fear of producing displacement or prolapsus, and inverting the uterus. Now, in ninety-five cases, probably, out of a hundred, the placenta will be found lying in the pelvis immediately after the birth of the child. This can be easily ascertained by introducing the index and middle finger of the right hand, and tracing the cord up to its insertion in the placenta. This can readily be felt, and a large portion of the circumference of the placenta.

In such a case a gentle traction on the cord, directing the patient at the same time to blow in her hands, thereby causing contraction of the abdominal walls, will remove it. It is the duty of the physician to ascertain whether the placenta is adherent as promptly as possible, and having learned such to be the case to break up the adhesions promptly.

When I discover an adherent placenta I at once give the patient a fluid dram of ergot and wait fifteen or twenty minutes in order that the system may have an opportunity to respond fully to its influence. Contractions coming on I attempt to assist them by gentle traction on the cord. This failing to be efficient I proceed to deliver manually. I do this promptly because the parts are thoroughly lubricated with mucus and blood, are largely distended and less dry and less congested than they would be if the relief were postponed. I give the patient if in condition to justify it a few whiffs of chloroform to obtund sensibility, and, lubricating my hand thoroughly with opaline or vaseline, introduce it carefully into the vaginal and uterine cavity, insinuate my fingers between the placenta and the uterine wall and after detaching all adhesions draw down the placenta in the hollow of my hand, the dorsal surface of my hand resting against the fundus of the uterus. Existing adhesions are as readily broken down shortly after delivery as later, and with less shock to and uneasiness on the part of the patient. It removes the danger of infection from a mass which tends rapidly to decomposition when left lying in the uterine cavity, and permits complete contraction of the womb and expulsion of all coagula. If clots of blood should be removed so also should an organ which, though essential to the nourishment of the infant in utero, has performed its functions and is actually a foreign and decomposing body from the hour of delivery.

That old bugaboo about producing inversion of the womb by traction on the cord should be removed from text-books and the teaching of the schools. In the first place, traction on the cord will not act on the uterine walls at all unless the placenta is adherent, and if it did would act on all alike. It is barely possible such a result might follow in case of adherent placenta; but we are writing on the hypothesis that it is the physician's duty

to ascertain whether such is the case. Should this be true, in 999 cases out of 1,000 the cord would separate at its insertion into the placenta before the uterus would be inverted. Judicious and gentle traction on the cord, first in the plane of the axis of the superior strait and second in that of the inferior strait, will almost invariably be a valuable assistance in delivery of the secundines.

The dangers of inversion, irregular contraction and hour-glass contraction of the womb are more likely to be produced by Credé's method than by traction on the cord. Credé's method of expression is unphysiological. It is the partial application of an irregular force to a surface over which the force cannot be distributed as a totality. At some part of the circumference of the body of the organ the force will act more powerfully than others. Such an application will have a tendency to cause wrinkling and irregular contraction of the organ at the point where applied. Again, ill applied or extreme pressure may injure the walls of the organ, causing inflammation or acting upon the peritoneum to produce peritonitis. In case of adherent placenta the expression introduced by Credé would merely press the opposite uterine walls together and retard instead of facilitate delivery. Every argument advanced which limits the usefulness of direct force applied to the placenta also limits that introduced by Credé and his followers.

There are two substances in nature readily expelled by the method of Credé, viz., air and liquids. We apply pressure to expel air from the bulb of the syringe and the wrinkling of the bulb reveals how irregular are the contractions under force thus applied. The same is true of liquids, although the external pressure of the air and the ready movement of the molecules of water upon each other tend to equalize the force to a much greater extent. But where is the man who having a solid substance in the bulb of his syringe attached to the walls would rely upon external pressure to expel it.

I have thus given you a few hastily written ideas on obstetrics. They represent my convictions and experience, and are given for what they may be worth. Possibly broader research and larger experience may change them in years to come.

THE OFFICES AND MANAGEMENT OF THE MEMBRANES IN NATURAL LABOR.

By G. A. Moses, M. D., *Prof. of Obstetrics and Diseases of Women in Missouri Medical College.*

[Read before the St. Louis Medico-Chirurgical Society, July 14, 1885.]

In February last the eminently practical and able observer, Dr. Byford, of Chicago, read a brief essay upon a subject that the practitioner of years may perhaps look upon as trite and unworthy of further notice; but a little reflection and recalling of many experiences will certainly cause him to think the matter worthy of consideration. I allude to the "offices of the membranes in labor" and of their proper management.

The common teaching is to the effect that if they are not spontaneously ruptured when the os uteri is well dilated, the accoucheur should rupture them.

Lusk, p. 205, says: "Rupture of the membranes is, as a rule, a spontaneous act. Yet often something may be done in the way of shortening labor by puncturing the membranes as soon as the cervical dilation is completed. They have then fulfilled their physiological mission, and their *persistence simply retards the advance of the child's head.*" Playfair (p. 279) gives the same advice and reason, and on page 257 Am. Ed. (1880), speaking of the occasional preservation of the membranes until final expulsion he says, this would doubtless happen more frequently were it not the custom of the accoucheur to rupture as soon as the os is completely dilated, "after which their integrity is *no longer* of *any value.*"

These rules, approved by our latest authorities, have been our guides for many years, and until within the past three or four years I have invariably acted upon them, but since the advancement of gynecological studies has induced us to overhaul our knowledge of women's troubles in general, cervical, vaginal, and perineal lesions have assumed vastly greater etiological impor-

tance than formerly, and prophylaxis demands more careful analysis of many well established rules. Some years ago I determined to await in every case, when there were no contraindications, the spontaneous rupture of the bag of waters, with the chief object in view of observing the effect upon the vaginal and perineal tissues, and while in but few cases have the membranes protruded to any degree beyond the vulva, I think these have indicated that their integrity was of value, and my object in presenting the subject to your attention is to elicit your opinion and experience, and at the same time to urge that each one will pursue the investigation as opportunity shall afford, in order that a reliable result may be arrived it. May not the fact be, that, as in some other points of practice, we have set aside the teachings and practice of the earlier writers to our disadvantage? Permit me to quote from a few of the fathers in midwifery:

James Burns, 1810, in his 5th edition: "The membranes ought, generally, to be allowed to burst by the efforts of the uterus alone, for this is the regular course of nature. * * * I cannot, however, go to the length of some and say that the evacuation of the water is always hurtful; for there are circumstances in which it may be *allowable* and beneficial. It is allowable when the os is fully dilated and the membranes protruded, perhaps even out of the vagina. * * * But although the practice be not detrimental, yet it does not thence follow that it is always expedient; and it will be a useful rule to adhere to, that the less frequently we interfere in this respect in a natural labor, the more prudent shall our conduct be."

Smellie (Syd. Soc., p. 213, vol. 2) speaks of rupturing the membranes if there be a large quantity of water, or a delay after they have protruded into or beyond the vagina.

Denman says, "that there is infinitely more caution required to avoid breaking the membranes too early, than there is difficulty in breaking them when necessary." "That neither mother nor child is ever in danger (except from hemorrhage or convulsions) on account of the labor, before the membranes are broken."

Ramsbotham: "It is desirable to preserve the membranous bag entire as long as possible, or at least until it has performed

the whole of the office designed for it by nature; namely, the dilatation of the os uteri, *the vagina and somewhat of the external parts.*" * * * It is one of the first axioms to be learned in obstetric practice, not officiously or unnecessarily to destroy the cyst, so long as any advantage can be gained by its dilating powers."

Dewees, the father of American midwifery, was among the first to teach the present rule, and, as in all his valuable teaching, he gives the reasons for his views—but too fully for quotation here—if the pains are efficient, the os well dilated or *dilatable*, the membrane he directs to be ruptured—thereby expediting labor and promoting post-partum contraction.

Scanzoni and Naegele both teach the general rule of non-interference.

While we may admit that the first office of the elastic wedge is to gradually and harmoniously assist in dilating the os uteri, is it not reasonable, especially in primiparæ, to regard as of very great value the same agent in preserving the vaginal tract and outlet from the sudden impact and more or less prolonged pressure of the comparatively unyielding head? If the sac is unruptured early it protrudes in a more elongated form and at each relaxation of uterine effort, as the head somewhat recedes like a ball valve, an increased amount of liquor amnii escapes into the anterior segment, thus giving additional size and force at each ensuing pain, so that after dilatation of the os is complete and the second stage has commenced the uterine axis is shortened and the forces brought to bear more directly upon the child, yet without the direct contact which ensues as soon as the water has been released, resulting at times in danger to the life of the child and necessitating manual interference for safe delivery. While this is only an occasional result, there is a not infrequent condition which gives rise to pain, delay and maternal injury—that is, the engagement over the head of one segment of the cervix, almost always the anterior lip, which is caught over the descending vertex, distended with great force and compressed between the symphysis and head to a degree at once painful and fraught with danger to the integrity of the cervical tissues. This could always be avoided if the cyst re-

mained intact until the relaxation was complete and the head safely through the os before rupture; thus pathological lacerations of the cervix would be prevented to a great degree, if not entirely.

The perineum is dilated by the descending mass. If this be the head, as is common, the tissues are put upon enormous strain vertically to the course of the muscular fibres by being stretched over the spherical vertex, so that the most prominent projection is just anterior to the anus, while the anterior border of the perineum is hooded over the convexity. In this manner the prolongation of the tissues is at the utmost; if, on the contrary, the impinging force were first the somewhat pliable bag of waters, it would yield so as to avoid the point of greatest resistance, *i. e.*, the centre, and attack at or near the border so that the tension would take the form of simple dilatation; that is, the muscular fibres must be stretched longitudinally rather than vertically, as though the perineum were pressed backwards and downwards instead of directly downwards with the greatest stress centrally applied. I have endeavored to accomplish this in primiparæ by stretching with two fingers backwards as the head approached the perineum in order to avoid as far as possible the direct propulsive strain which begins with the impingment of the head. I have closely observed the process which I have endeavored to describe, in cases in which the sac has been thus happily preserved and the lacerations have been of trifling moment.

A most annoying sequel to many confinements, particularly first ones, is the retention of urine, occasioned by a temporary vesical paralysis, or a painful spasm of the neck of the bladder, resulting in inability to void urine and most painful catheterization from lesions about the vesical outlet, resulting from prolonged or severe pressure against the bladder walls or urethra, the first occasioning the muscular atonicity, the second contusion of the neck of the bladder or urethra, causing sometimes the exquisitely painful fissures described by Skene, of Brooklyn. These would, I believe, be very rare, if the membranes could be preserved until the vaginal canal and outlet could be in good degree dilated before the head itself would reach the obstructing site.

The expressed object of artificial rupture is the acceleration of labor. Under ordinary circumstances, that is in cases of "natural labor," which is the form to which we alone refer, should labor be accelerated? Decidedly not; particularly in first labors, where Simpson concisely says, "let the membranes alone," if they do render the labor a little slower than attendant or sufferer might desire; the slowness is a part of safety, and it is in the power of the accoucheur to hasten if impending danger demands haste. Rapidity in labor is fraught with danger and should only be brought about under skilful guidance to counterbalance a greater danger threatened.

I need not quote authorities to substantiate this.

Intact membranes may, under certain conditions, be detrimental in retarding propulsive efforts. Under such circumstances, rupture, but try to be sure that this is the cause. Inertia uteri may arise from over-distension, from an abnormally intimate adherence to the uterus, and rendering the uterine efforts inefficacious. These are special cases not alluded to in this paper.

Nor do I take into consideration the value of a bag of waters if manual interference should become necessary. I wish to confine the subject strictly to the management in natural labors, and I think we may conclude that the functions of the fetal envelope and contained fluid, are not necessarily limited to the distension of the cervix uteri, but to assistance in the preparation of the entire parturient canal for the enormous dilatation to which it is condemned.

PEPSIN AS A THERAPEUTIC AGENT.

BY DR. L. H. ENGELKEN, ST. LOUIS.

PEPSIN is given as a medicine when it is supposed that from some cause or other the secretion of pepsin in the stomach is imperfect and that disorders of the digestion can be referred to a want of this substance. I am, however, of opinion that the merits of this agent are in many cases overestimated, and I propose to prove that.

First, a few remarks upon the physiology of pepsin. Pepsin belongs to that peculiar class of chemical substances which we call ferments. The smallest quantities of a ferment produce quite extensive chemical effects, which without them can be obtained only, if at all, through the application of a very high temperature or by using energetic means for oxidation and reduction. The following principal properties are common to all of them. They belong to organic nature, they operate only in the presence of water, their products contain more oxygen and hydrogen, that is in the proportion of water H_2O than the primary substance; they act most quickly in temperatures of 100° F. or thereabout, and they can bear without damage a lowering of temperature to 5°. These general properties are also those of pepsin. Its specific nature is to convert albumen into peptone, a body supposed to be of the same chemical structure as albumen, having taken water (H_2O) into the chemical formula, and which body, besides possessing other characteristic qualities is capable of diffusing through animal membranes about seventy times easier than albumen. But pepsin alone is not capable of producing this effect: the presence of an acid is necessary, by preference muriatic acid, such as the stomach produces about three to four per cent. strong. While, I repeat it, very small quantities of pepsin suffice to maintain digestion, this is not the case with muriatic acid, which exhausts itself, and in a digestive mixture, after having dissolved a certain quantity of albumen, requires renewing. What role the muriatic acid really plays in this process, how it acts and how it is consumed, is not yet fully elucidated. Finally, with a large amount of albumen and a long duration of the digestive process it occurs that pepsin also becomes ineffective, disappears and must be replaced. Both pepsin and muriatic acid are generated in the glands of the stomach. They do not exist when the stomach is empty, but show themselves immediately when, by taking nourishment, the mucous membrane becomes irritated. Twenty minutes after the process of digestion begins peptones have been found to exist in the contents of the stomach. As long as there remains anything in the stomach the secretion continues. Its intensity, as also the duration of the digestive process, varies con-

siderably. Many circumstances enhance it, others obstruct it. Thus the use of spice accelerates the secretion and consequently the digestion; neutralization of the gastric juice destroys it; the salts of the heavy metals, also alcohol and carbolic acid, retard it. One of the greatest obstacles to digestion consists, however, in the peptones themselves which envelop the particles of albumen. For this reason, too, further conditions are needed for a proper course in the process of digestion, viz., quick resorption of the peptones through the mucous membrane, and vigorous peristaltic movements. The latter we endeavor to substitute in our digestive mixtures by shaking. We have seen that small quantities of pepsin are sufficient to maintain digestion. The question then arises, whether conditions of sickness occur in which the production of pepsin has completely ceased or at least been decreased to an extent destructive to the digestion. The first investigations in this direction were made by Leube. He took by means of a tube from the stomach of his patients, two hours after a meal, a quantity of fluid chymus, filtered it and divided it into three vessels, adding muriatic acid to the one, pepsin to the other and leaving the third without any admixture. He then watched the time requisite for the digestion and found that in but very few cases pepsin aided the digestion, while muriatic acid furthered it in many. After the physiological explanations this will be quite comprehensible. Of late years very searching inquiries into the value of pepsin as a remedy have been published by Schuetze. He calls the quantity of pepsin which produces one gram of peptone a pepsin-unity, and refers it to one "cubic centimeter" of gastric juice. The quantity of peptom was found out by the polarimetrical method. In healthy persons he found the quantity of pepsin to vary considerably (from 0.41 to 1.17 unities), still more so in persons suffering from gastric diseases. Out of twenty-five serious and original diseases of the stomach (no cancers) no pepsin was found in four, and only very small quantities (as low as 0.05 unities) in nine cases. In three cases of carcinoma 0—0.03—0.14 unities were detected. In all cases of slighter disorders of the stomach the quantity of pepsin was almost normal; in many cases of acute gastric catarrh it was not diminished. In nervous dyspep-

sia the gastric juice differs but little from that of the healthy stomach (0.24 to 0.87 unities in eleven cases) with very sour reaction. Seven cases of anemia and chlorosis showed entirely normal conditions, notwithstanding severe complaints; also in five cases of pulmonary consumption complicated with gastric disorders, the so-called "dyspeptic phthisis," Schuetze found normal proportions. In one case of this kind, however, he observed only 0.015 unities.

What do we argue from these important experiments? I infer from these as also from numerous observations made by others and by myself, that in all cases of slight disorders of the stomach it is superfluous to give pepsin. In cases of stomach complaints in chlorotics, anemics and convalescents, which are of such frequent occurrence, pepsin is generally employed, although other remedies give better results. It is not so much the want of pepsin which causes the disturbances, as rather a weakness of muscles of the stomach, an *atonia muscularis*. The peristaltic motions take place in a powerless and imperfect manner, and from this reason the contents of the stomach are not thoroughly agitated and carried down to the pylorus. In this case a strengthening treatment is suitable, a mild cold-water cure, a strong and stimulating diet, wine, slight seasonings, iron tonics, faradization of the gastric region. This also applies to cases which frequently occur and which are not mentioned by Schuetze, in which, in a stomach otherwise healthy, rather too little gastric juice is secreted, and therefore the food remains too long in the stomach undigested. Such persons instinctively take recourse to spice as a stimulant to the mucous membrane. Here is our duty to regulate the use of spice and other stimulants and to reduce them to moderate proportions, while, as also stated by Leube, the use of muriatic acid and of pepsin would be plainly injurious, as it would perform the work of the mucous membrane, and thus very probably lower its energy still more. In cases of nervous dyspepsia, a neurosis of the stomach, no good can be expected from it either, because, as we have seen, notwithstanding all the abnormal sensations, the digestion is undisturbed. Feverish patients are treated advantageously with acids. I am of opinion that an addition of

pepsin would increase the desired effect, as it is known that the secretion of the stomach in fever is considerably lowered. The cases of dyspeptic phthisis which came under my observation (I do not speak of those in which an *ulcus ventriculi* terminated in phthisis,) took so rapid a course to a fatal issue, that I do not expect results from the use of any remedy. Above that, the observations Schuetze has made also show unfavorably for the use of pepsin. In case of *ulcus ventriculi* it is decidedly injurious to employ remedies which are apt to irritate the stomach. There remains to consider chronic gastric catarrh, enlargement of the stomach and carcinoma. In the treatment of chronic catarrh and enlargement pepsin finds a moderate place. Previously other more important indications must be met with. Through the use of alkaline waters the mucus is loosened and secretion promoted; a strict and minutely prescribed diet facilitates the work of the stomach and the tube empties the stagnant and fermenting contents. After all this is done we may consider whether we cannot accelerate and render more perfect the digestion of the food introduced by the use of pepsin and muriatic acid. The best way to decide which of the two remedies is preferable in each case would be the experimental method of Leubes, as described above. But not every one takes at once recourse to the stomach pump, and we are confined to experiments with the two drugs. With carcinoma it is different. Here also the quantity of pepsin, and I will add of the muriatic acid is considerably lowered, as shown by the experments made by Riegel, and cases occur where neither of the substances are met with. It is difficult to explain this fact, for we frequently find these conditions combined with serious disturbances of the digestive process when there are but very tiny knots which one would not think capable of paralyzing more than an insignificant part of the mucous membrane. Experiments have led, of late, to the conviction that cancer juice acts destructively upon gastric juice and deprives it of its digestive power. If such be the case, neither pepsin nor muriatic acid will improve the digestion; they have therefore been abandoned in the treatment of cancer patients.

On being determined to give pepsin in any particular

case, we must not only be most careful in the choice of the brand but also as to where we procure it, for there is a vast difference between pepsin and pepsin. The numerous brands in the market differ widely with regard to their effective substance and accessory constituent parts. The drug also loses considerably when exposed to the air or in a solution, say of alcohol. Some pepsin which had remained at my house only wrapped up in a paper for six weeks proved entirely ineffective, while the same brand procured fresh from the drug store digested well. It will be best to procure an infusion of glycerine on fresh pig's stomach; this acts promptly and keeps its digestive power a long while. Of this a teaspoonful one-half hour after a meal in hot water or in a thin solution of muriatic acid, with a little syrup or wine to improve the taste. The infusion only develops its full activity after several days. One cubic centimeter infusion, two days old, in a solution of ten cubic centimeters muriatic acid of 3.3 per cent. digested at 100 degrees a slice of albumen in four hours, while the same infusion, four days old, dissolved a similar slice in one hour and a half.

Of American pepsin preparations I have subjected the following to a minute examination;

1. Pepsinum Americanum of Fairchild Bros.

Tiny brownish plates in cold water only partly soluble. Reaction neutral. Filtrate with an admixture of nitric acid being boiled becomes cloudy, also with an addition of acid acet. and magnes. suphat. After adding potassium hydrat and cupri sulphat distinct peptone reaction (purple violet coloring.) The residue is insoluble in acids and alkalies. Digestion experiment: Prepared as above, a slice of albumen was completely dissolved in two hour's time. The solution no longer contains albumen, but plenty of peptone.

2. Boudault's peptone is apparently quite insoluble in cold water as well as in muriatic acid. Filtrate gives neither albumen nor peptone reaction. The residue consists of about nine-tenths of amylum grains scantily mixed with granular and cloddy detritus. Strong iodine reaction. The digestion experiment gives a negative result.

3. "Golden scale." Brownish particles which exposed to the

air strongly attract water. Smell of the extractum carnis, Liebig. In cold water almost, in diluted muriatic acid quite soluble. A watery solution results on boiling in plenty of albumen. Filtrate gives a strong peptone reaction. Dissolving in muriatic acid the residue which did not dissolve in water, and neutralizing the same, albumen is precipitated. Digests under the same conditions as above a slice of albumen in three hours.

Judging by this it will not be difficult to make a choice between the several brands. We give pepsin by preference in powder about one-half hour after a meal. Alcoholic solutions of pepsin lose their effectiveness very soon, as experiments have taught me. Pepsin must never be given with alkalies as, for instance, bicarbonate of soda. From a physiological point of view such a combination is nonsense.

905 Hickory Street.

MEDICAL AND SURGICAL DIRECTORY OF THE UNITED STATES.—R. L. Polk & Co., Detroit, Mich., and 22 N. Fourth Street, St. Louis, have in preparation a Medical and Surgical Directory of the United States. Having issued directories of this sort in a number of separate States, they have special facilities and experience in this kind of work.

It will contain a full list of all Physicians and Surgeons in each state, alphabetically under the name of the city, town or village, and showing the school of practice, and name of college and class of graduation, when obtainable, the post office address, and in large cities the office, number and street will be given. Preceding each state will be found population, mortality statistics, number of physicians in state, a summary of state laws, covering the registration of practitioners, with penalties, etc. It will also give you names of all medical journals, price, editors, etc.; all medical colleges, boards of health, hospitals, asylums, private sanitariums, water cures and health resorts in the United States, and much other information of value to the profession, and those whose business is directly or indirectly connected therewith. The price of the volume will be $5.00

CASES FROM PRACTICE.

TWO CASES OF RAYNAUD'S DISEASE.

BY FRANK R. FRY, M. D., *Attending Physician St. Louis Medical College Dispensary—Department of Nervous Diseases.*

CASE I.—Mrs. F. ——, aged (about) 32 years. This patient has been under my observation two and a half years. When I first saw her there was an extreme general anemia—or spanemia—also uremia, metrorrhagia, great debility—so extreme at first that she was hardly able to come a distance of two blocks to the dispensary—heart weak and "irritable." The symptom, though, that especially attracted my attention was the apparently bloodless condition of her hands. From the tips of the fingers to the wrists they had a bluish-white color, and the feel could only be described as cadaveric. She complained of an almost constant aching in them. The feet were in a somewhat similar condition, the ischemia not being so decided or extensive as in the hands. She affirmed that this was almost the constant condition of these parts for a week, at least, after I first saw her, when she began to rapidly improve, the treatment consisting of digitalis, arsenic and iron.

She attributed her disease to an attempt on the part of her husband to poison her by putting matches in her coffee. I could discover no symptoms nor get a satisfactory history of poisoning from phosphorus. On questioning her I got an unsatisfactory history of syphilis, dating back more than a year, but I could discover no positive signs. Six months afterwards, when she had been absent from the dispensary for some six weeks, she returned, complaining of pain in the legs. On examination I found nodes on the tibiæ, clavicles and sternum, and made a diagnosis of syphilis, at this time getting a more satisfactory history of the same. She im-

proved rapidly on a prescription of the corrosive chloride of mercury in solution with iodide of potassium.

For the last two years her general health has been good. I have several times made examination of all the organs, including examinations of her urine. I have found no evidence of organic disease of any kind. The condition of her heart after improvement under first treatment has remained almost uniformly good. During this time she has frequently presented herself with the condition of the hands described above. But at no time since has it been so pronounced as then, the attacks becoming less severe and less frequent.

The treatment given above has been kept up with tolerable regularity, there being intervals of a month or more when I would not see her. It is three months since I saw her last.

CASE II.—Henry S——, aged 17 years. Short, stout, well built, well developed, with large muscular extremities.

Saw him first February 20, 1885, and had him under observation and treatment for one month. During that time I twice saw him with all the fingers of both hands back to the metacarpo-phalangeal joints in an asphyxiated condition, apparently bloodless, cold and stiff. He moved and used his hands in a clumsy manner as though they might have been stiff from cold. Sensibility was much obtunded. Until I had seen this condition I had no idea what the patient was suffering from, although I had seen him and prescribed for him several times prior to seeing him with an attack. Yet I was convinced from his complaints that there was some considerable trouble, but from his descriptions failed to get an idea of it. He had been sent to my department because he complained of "cramps" in his hands. I afterwards discovered that by "cramps" he meant pains, the pains accompanying and following this condition evidently being severe.

He stated that the attacks commenced gradually about one year ago, that they have been constantly getting worse. He has now from one to three of them a day, and they last from fifteen minutes to one hour.

I found the organs generally healthy. There was a slight degree of irregularity and feebleness in the action of the heart. There was improvement with the use of digitalis and iron almost immediately. The patient stated that the attacks occurred less frequently under this treatment. But afterwards they became frequent again.

I then gave him a solution of iron and sulphate of cinchonidia, and one-fiftieth of a grain of nitro-glycerine three times a day. He reported a marked improvement on this treatment, but when I saw him last he told me that the attacks were as frequent as ever.

Remarks.—The condition was perfectly symmetrical in both cases. In neither of the cases could I discover a possible exciting cause. Case I is a house-wife and dressmaker, never having had any severe or unusual employment for her hands. Case II has been employed for the last four years in a cotton-compress, where his work has been to put bands on the bales. There is no discoverable history of frost-bite or severe treatment.

Although not searching very diligently I found difficulty in obtaining literature on this subject, and considerable confusion in what I did find, the disease being variously described and referred to as local asphyxia, local ischemia, local syncope, Raynaud's disease, etc.

In the *New York Medical Record* for July 18, 1885, I was gratified to find a very satisfactory article on Functional Nervous Affections of the Extremities, by Prof. C. L. Dana. He gives bibliographical references too numerous to introduce here. I shall simply refer those interested to this valuable paper.

The immediate cause of this local syncope is undoubtedly vasomotor disturbance. A very full discussion of this phase of the subject is to be found in Vol. 6 of Ziemssen's Cyclopedia, the article on Diseases of the Arteries. Its remote causes are probably numerous. On this point I will quote Prof. Dana in the article just referred to: "It occurs in persons of an extremely mobile nervous system. Malaria or diabetes, exhausting disease, over work and mental strain are concerned in its etiology in most cases." Slight transient forms of the disease are not infrequently met with, but the symmetrical, paroxysmal, persisting form, such as the cases I have reported, is evidently rare.

703 Washington Ave.

In the U. S. Marine Hospital at Memphis last year (ending June 30) there were treated one hundred and twenty-seven white and one hundred and thirty-four colored patients with a mortality of seven white and sixteen colored patients. The average *per capita* cost was $30.50, a very reasonable figure, as in twelve New York hospitals, in 1884, the lowest *per capita* cost was $27.50, the highest $369.20.—*Miss. Val. Med. Mo.*, Aug., 1885.

MISSOURI MEDICAL COLLEGE—DISPENSARY DEPARTMENT FOR DISEASES OF CHILDREN.—CLINICAL CASES OF MASKED MALARIA.

REPORTED BY P. J. CONNOLLY, M. D.

In the August number of the COURIER OF MEDICINE appeared an interesting article from the pen of Prof. J. P. Kingsley, on Malaria in Children, wherein it is stated that malaria is a factor in the production of many evils and that it, more than any other disease, assumes various shapes and forms in its objective manifestations. No cases were cited and the writer's remarks simply rested on his authority. Corroborative, therefore, of the doctor's statements, the following cases treated at the Missouri Medical College Clinic for Diseases of Children are reported:

CASE I.—John L., æt. 7. First appeared at clinic April 6. Mother stated that her child had been subject to spasms for the last two months. These spasms, a very indefinite term used by a certain class of people, occurred at intervals of one week, for the first three weeks, and then every other day for the rest of the time. Her description of the "spasm" points to a convulsion, decidedly epileptiform in character. She graphically relates the attack in detail, the convulsive movements, the biting of the tongue, the frothing at the mouth, the livid hue of the countenance at the beginning of the spasm, the fall, the loss of consciousness—and even the voiding of urine during the attack. No history of nervous phenomena existing in the family.

Upon inquiries it was ascertained that the child had been feeling unwell for several weeks previous to the appearance of any nervous phenomena. She stated that the child had fever every other day, that it was restless at night, acted at times even delirious; that it was heavy and drowsy, caring little for play or sport. Indeed, when it was presented at the clinic it displayed a dull, stolid, sleepy expression varied only by repeated yawning and gaping. Upon inspection the tongue was found to be covered with a dark yellowish coat, and the spleen was somewhat enlarged. Quinine was administered in doses of a grain and a quarter every three hours.

April 13. Child again appears at clinic. Its appetite is much improved and it has had but one spasm since taking the medicine;

the fever still exists, though the child rests much better at night. Treatment continued.

April 20. Has had no spasm since. Temperature normal, nor has the mother noticed any fever; tongue clean and appetite good. Its previous dull, stolid, heavy expression has now given place to a sparkling liveliness and general good health.

Case II.—Bertha K., æt. 13. May 4. Has always been healthy, and there exists no hereditary taint in family. A hasty glance is sufficient to diagnose the case one of chorea. Indeed, the symptoms so characteristic of this malady are peculiarly manifest in this case. There is no rheumatic history, and the heart sounds are regular. Besides the choreic manifestation, which alone caused the anxious mother to seek the aid of a physician, a history of malaria is given. To our questions we have the familiar answers; no appetite, feeling of ennui, fever every day, growing worse towards evening, headache, pain in back, sour taste in the mouth upon arising in the morning, frequent gaping and yawning, etc. The objective symptoms in the case were: A coated tongue, sallowness of complexion, elevation of temperature and an enlarged spleen.

A treatment of quinine in combination with arsenic is prescribed.

May 20. Much better. Appetite improved, the pain or rather the numbness at first complained of, is now no longer felt. The nervous phenomena still exist, though in less marked degree.

May 27. Choreic movement slight and only appreciable to a close observer. General appearances are favorable; the appetite is good; there is no fever and the spleen has been reduced to its normal size.

June 3. No symptoms whatever of previous malady and the patient is dismissed as cured.

Case III.—Willie F., æt. 4. May 23. Mother says that her child is very irregular in its bowels; for some days there is a diarrhea with frequent stools that are bloody and mucous in character, then again there is constipation. This condition has lasted three or four weeks. Besides there is fever every day, loss of appetite, restlessness, thirst, pain in the epigastric region, elevated temperature, coated and furred tongue, rapid pulse, a sluggish expression and tenderness on pressure in epigastric and umbilical regions. Quinine is prescribed in combination with bromide of potassium.

June 2.—Improvement marked; bowels are regular. The child has an operation every day and of the natural color and consistency, while its appetite is a marvel to its parents.

June 9.—The child, to use the mother's expression, was never in better health. Its general appearance indicates good health and a fulness of life and spirit.

CASE IV.—Katie M., æt. 3. July 1. Presented at clinic to-day to be treated for cold. Mother states that child coughs frequently, cough being croupy in character. On inspection is observed the rapid and somewhat labored respiration, the elevated temperature, the flushed face, and the constant restlessness of the child. Mother states that has been the condition of her child for the last two weeks. Upon a close examination the tonsils are found enlarged and turgescent; bronchial rales are heard over the chest, the tongue is found coated, the pulse irregular, at 120; respiration 60 per minute, and a general feebleness and prostration.

Quinine and bromide of potash are prescribed.

July 6.—Previous symptoms have entirely disappeared. The child rests better. No appearances of tonsillitis, chest sounds are regular and the little one has fully regained what it had lost.

These are but a few of the many cases that are presented daily to the clinic. The histories as given in the above cases are gleaned from the statements of the patients. Allowance, therefore, is to be made for many inaccuracies which may appear. Where twenty or more are examined daily and that within the space of an hour, that close observation and careful examination so necessary in private practice is neglected at clinics. The diagnosis is based upon the symptoms present and upon the history given.

A treatment is accordingly administered, and upon its success is the diagnosis confirmed.

LARGE DOSES OF SALINES IN DROPSY.

BY GEO. F. CENTER, M. D., JACKSONVILLE, FLA.

July 15, 1885, I was called to see Mrs. J.—— J.——, a negress, æt. 20. She was propped up in bed with pillows, breathing with great difficulty, gasping for every breath. She was pulseless at the wrists and ankles. The heart beat so feebly that I could not count

the pulsations with a stethoscope. There was general anasarca. The eyelids were about an inch thick, and the face and neck were swollen to the full capacity of the skin. The abdomen was a trifle over sixty inches in circumference, and her arms, hands and lower extremities were of immense dimensions. She had not slept for four days and nights; her mind was dull; she answered questions slowly and with great difficulty, and could not speak above a whisper. She complained only of a slight soreness in the left hypochondriac region. Her temperature was sub-normal—96°. Heat and nitric acid showed no albumen in her urine.

I left four one-and-a-quarter grain doses of opium, one to be given at once, and the others every five hours, unless asleep. Ordered a mixture of five ounces of brandy and one ounce of tincture of digitalis, one tablespoonful to be given every second hour in the same quantity of milk.

July 16. They had given the five grains of opium, also the brandy and digitalis, as directed. Patient slept half an hour—otherwise in the same condition as on day previous. Continued brandy, digitalis and opium; also ordered two large tablespoonfuls of sulphate of magnesia, to be given every third hour, in not quite an ounce of water, or as little as possible to make a thick solution of the salts, and no water to be given to drink.

July 17. They had given eight doses of the salts, and the other remedies as previously directed. Patient had slept three hours, the pulse had returned to the wrists and ankles; she felt better; edema much reduced.[1]

July 18. Patient improving, continued same treatment.

July 19. Her eyelids, face, hands and the upper and lower extremities were reduced to less than their normal size. The skin

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1. The direct effect of these large doses of a concentrated solution of Epsom salts was a copious free catharsis, with little or no after irritation of the stomach and intestines; in fact, the vomiting which previously occurred whenever she ate or drank anything ceased at once, and there was no diarrhea when the medicine was discontinued. At first the discharges were of a white, clay-like substance, intermixed with water. Then they became more yellow, and mere yellow water, with and from an admixture of feces. This yellow watery excretion continued until all the excess of dropsical effusion was removed from her body.

As near as I could get at the number of her evacuations, they were nine the first day (16th), fourteen the second day, sixteen the third day, and eleven the fourth day, about fifty evacuations in four days.

was wrinkled on her face and limbs, and her abdomen was reduced in size; temperature normal; pulse feeble and about eighty per minute. Her heart seemed to beat in a pericardium nearly full of fluid. Continued the brandy and digitalis, reduced the opium to one grain doses, and salts to be given five times during the next twenty-four hours.

July 20. Her abdomen is reduced to nearly the natural size, her heart beats stronger and there is less pericardiac effusion.

The patient is very much stronger, for she got out of bed and walked into another room.

August 3. Since the 20th of July she has been on a tonic treatment, and has been gradually gaining health and strength. She eats and sleeps well, complains of some little soreness in lower part of her abdomen, although apparently without cause, for bowels act naturally once a day. You will please notice that in five days this patient took about two pounds of salts, nineteen grains of Squibb's powdered opium, twenty ounces of brandy and five ounces of tincture of digitalis. The effects of these prodigious doses were carefully watched, and judging from effects, they were none too large to do their rapid work of snatching this woman from the very jaws of death, and at the same time fully re-establishing the fact, by their positive action, that medicine properly given will produce definite results.

PRIORITY. In a late number of the *London Lancet* appears an article describing an atomizer which possesses the great convenience of an opening bored into the shoulder of the bottle into which the spray tube fits. This opening is covered with the finger tip when the instrument is in use; removal of the finger allows the compressed air to escape and the spray at once ceases. This improvement is a very essential part of the apparatus. It is the simplest valve arrangement possible. It was first described by Dr. Charles A. Todd, of St. Louis, several years ago, both in the COURIER OF MEDICINE and in the Transactions of the American Otological Society. The hole can be easily drilled by use of common brace and drill, first notching the glass with a file and applying water with emery powder. Care must be taken not to press the drill too hard against the glass.

EDITORIAL.

TYROTOXICON OR CHEESE POISON.

At a recent meeting of the Michigan State Board of Health, Dr. V. C. Vaughan read a paper containing a valuable study on cheese poisoning.

Cases of severe illness following the eating of cheese have occurred not infrequently in our own country, and in different European countries. Some years ago the reputation of a large cheese factory in Ohio was destroyed by the occurrence of a large number of cases of serious illness from eating its cheese. A German writer has stated that this effect is more likely to follow the use of soft (cottage) cheese, made in small quantities; but it has also occurred from eating cheese manufactured in large factories by skilled workers.

The symptoms of cheese poisoning are very similar to those caused by sausage-, canned-meat- and fish-poisoning, though the latter have proved fatal more frequently than has cheese-poisoning.

No peculiarity of appearance, odor or taste distinguishes "sick" cheese from that which is good, though if specimens of two cheeses —one poisonous and the other wholesome—were offered to a dog or cat, the animal would select the good cheese.

Chemical examination alone will detect with certainty a poisonous cheese. The most reliable ready method Dr. Vaughan believes to be that which he suggested a year ago, viz., to press a small strip of blue litmus paper against a freshly cut surface of the cheese. If the paper is reddened instantly and intensely the cheese is to be regarded as suspicious. Any green cheese would redden litmus

paper, but ordinarily the reddening would occur slowly and only slightly. Dr. Vaughan does not offer this as a test free from error, but as the most reliable test that can be easily applied.

Dr. Vaughan has isolated the poison, to which he has given the name tyrotoxicon. Slight putrefaction takes place and a large amount of butyric acid is formed, and this, in the presence of casein, develops the poison. The amount of poison in various samples of cheese varies greatly.

The poison was obtained in long, needle-shaped crystals, freely soluble in water, chloroform, alcohol and in ether. The smallest visible particle of a crystal placed on the tongue caused a sharp, stinging pain at the point of application, and in a few minutes dryness and a sense of constriction of the throat. A little larger quantity produced nausea, vomiting and diarrhea.

Inasmuch as the poison is volatile at 212° F., even poisonous cheese becomes innocuous when cooked.

Having thus determined what the poison is which produces the trouble Dr. Vaughan's endeavor will be to ascertain the means of preventing its formation.

SPIRITUS MAIDIS RECTIFICATUS.

Dr. Henry Leffman read before the Philadelphia College of Physicians, June 3, 1885, a paper entitled "A Plea for the Medicinal Use of Pure Alcohol and Alcoholic Mixtures of Known Composition in Preference to Ordinary Fermented Liquids."

He observes that while those who prescribe liquors a great deal, are very apt to lay a good deal of stress upon the efficacy of the other ingredients than the alcohol, viz., the compound ethers, astringents or bitters, close observation of their practice will show that the effect of the alcohol is really that for which the liquor is prescribed; and, moreover, in a majority of cases the accessory ingredients are either unknown or unrecognized.

He argues that an agent of such powerful physiological activity

should be used only under the most definite conditions. He shows that nothing is definite as to quantity or combinations of alcohol in fermented liquors, and the difficulty, approaching impossibility, of obtaining any pure imported wines or liquors is yearly becoming more marked.

He therefore suggests, first, that in all cases in which the general physiological effect of ethyl alcohol is desired, it should be given by prescription in the form of a rectified spirit of standard strength. Dr. A. W. Miller has suggested as the name of such a pure, standard spirit the name which stands as the title of this article. "Where is the physician," he says, "who would say to a patient, take a little laudanum or chloral every day, and leave to the patient or the druggist the duty of determining the dose, or the duration of the treatment? Yet every day physicians give similar recommendations in regard to liquors. The use of rectified spirits in prescriptions is to be recommended on the same ground that we give potassium bromide and iodide in accurate dosage, instead of the sea-water which contains them, or morphia and quinine instead of opium and Peruvian bark."

The question of expense is another one that is well worth considering, as a pure French brandy, for instance, costs $12 per gallon, while an equally efficient spirit may be substituted at very much less cost.

In cases where it is thought that the accessory ingredients have some therapeutic value, or are considered necessary to tempt the palate, he would have the pharmacist add such flavoring essences, bitters or other ingredients, as the physician may indicate upon his prescription. In short, he would use systematically and openly the chemical skill which the compounder of liquors now secretly employs, and physicians should know definitely the quantity and character of the various ingredients taken by his patient, instead of ordering vaguely, as now, an indefinite quantity of this or another liquor.

MEASLES: ITS MORBIDITY, MORTALITY AND PREVENTION.

In *L'Union Médicale*, May 7 and 9, is a paper by M. Ch. Eloy which discusses the prevalence and mortality of measles and measures for its prevention. He asserts that the laity and physicians as well have regarded too lightly the influence of this disease, and have paid too little attention to the measures which may be adopted for its prevention. Moreover, he asserts that vital statistics demonstrate an increased mortality from that disease of late years, and he cites observations in a number of places which support this claim.

The contagion of measles has a variable potency at different periods. Popularly the stage of desquamation is, in this respect, most dreaded. Various authors, whom he cites, have held that even in the catarrhal stage the disease is contagious. It has been proven to be inoculable by means of blood, tears and nasal mucus. He regards the true nature of the virus as utterly unknown. He does not accept as demonstrated yet the pathogenic action of any of the micro-organisms which have been claimed by various observers to be the specific agents in the causation of the disease.

He shows that the disease has been carried by conquering armies and by travelers into nearly all parts of the inhabited world, until the only regions in which it has not prevailed endemically or epidemically are the circumpolar regions of North America, Greenland, Melanasia and Arabia.

Comparison of the severity of the disease in cold and warm climates does not seem to warrant the assertion that cold climates favor its prevalence.

The influence of age is well known, as is the place which measles holds in the pathology of childhood. The statistics cited show that the mortality from measles is in inverse ratio to the age. Still it is not alone in childhood that it is to be dreaded. Military statistics show that it is still an important factor in the diseases

among soldiers from twenty to twenty-two years old, and hospital records show the same fact with regard to a good many adults among the poor classes of cities.

In the family, isolation of the patient is necessary. In principle no one doubts its urgency; but practically we are obliged to consider social exigencies, the age, the constitution of the individuals and the country in which they live. Measles is most to be feared for little children, and the age between two and five years is specially susceptible. It is to be dreaded for those who are feeble, whether the debility be that of infancy or of senility. By its complications it is disastrous to those who are affected with gastro-intestinal diseases or affections of the respiratory passages, likewise for the rachitic, for those with deformed chests or predisposed to tuberculosis. It is important then at all cost to remove such from the danger of contagion.

M. Poincaré has remarked that regard should be had to the prevalent type of the disease. In countries where it prevails in a malignant form, more rigid isolation should be observed, and greater precautions enjoined than in countries where the type is mild. In order to prevent the dangers from promiscuous intercourse in close tenements among the poorer classes he would have hospitals established in which measles patients can be isolated, just as is now common with small-pox patients. In Glasgow, he says, there is such an institution, where families occupying infected habitations can be kept for a week or two during the disinfection of the contaminated abodes.

One means of contagion more easy to prevent is the conveyance of contagion by the clothing. These should be removed rapidly from inhabited places, those without value being burned, and the others being immersed in disinfectant solutions. The stools should be disinfected with chloride of lime, permanganate of potassium or phenic acid.

The possibility of contagion being carried by physicians, nurses or visitors imposes obligations upon persons who have to do

with measles patients. M. Poincaré advises physicians to leave these patients for the last visits, or else make a long trip in the air before visiting families in which there are children or persons of great susceptibility.

In the case of a mother with a nursing child, of course isolation is impossible. It has been said that the chances of contagion are slight in infants of less than a year, yet M. Eloy thinks that they are sufficient to demand precautionary measures, and cites statistics showing that no inconsiderable number of infants, less than a year old, die from this disease. He insists upon the absolute isolation of young nursing infants in families where measles is prevailing. The nursling should be kept in a room as far removed as possible from that which is occupied by those having measles; and the mother, if obliged to attend upon the sick, should only nurse the infant after having changed her clothing, and in the sick room should wear an impervious overgarment.

A scrupulous observation of prophylactic measures is most necessary in a hospital atmosphere, on account of the aggregation and susceptibility to measles of those sick or convalescent from other diseases. In some countries where the disease has been very fatal, special measles hospitals have been established. This is the case at St. Petersburg. M. Eloy regards the waiting rooms of dispensaries and hospitals as specially favoring the propagation of the disease.

When measles breaks out in a school all the conditions are favorable for rapid propagation of the disease. In such cases M. Eloy recommends dismissing the school on the first development of the disease and sending the children home in order to avoid the developing of an intense contagion by the presence in one building of many sick. He thinks that ten or twelve days should elapse after the desquamation is complete before the patient is allowed to return to school or to mingle with those who have not been affected, in the course of which time the clothing should be disinfected and a soap or sulphur bath should be taken.

In conclusion he quotes the opinion of M. Poincaré, viz., "In the strife against measles therapeutics is warfare with its uncertainties and prophylaxis is armed peace and veritable security."

THE CELLULAR DOCTRINE AND THE BACTERIA THEORY.

"The cellular pathology has had its day. Our body is no longer that 'republic of cells, each having an independent existence, often dangerous through their ambitious plots and aggressive tendencies to the social system which binds them together.' That was the republic dear to the German Professor, Virchow. Down with the cells, hail to those entities, infinitely small, but prolific, having racial character, living in various media, coming from the outside world and penetrating into the organism to ravage it by the right of invasion and conquest."

In these terms does a French medical print proclaim the paramount rule of the microbe, first honored on Gallic soil and thence proceeding to the overthrow of Germanic fortresses. The discoveries of Pasteur and his school have given rise to new views as to the causes and nature of diseases. The fact that inoculation does modify some virulent contagia, leads to the hope—a faith with many enthusiasts—that every disease has its provoking microbion, and that symptoms are but the indications of its ravages in the system. This ultra view is but another manifestation of the ruling spirit of "materialism." Grant that a bacterium is capable of causing derangement of the bodily health, either by its direct action or indirectly through the effects of alteration in the animal liquids and solids caused by it, what then? There always faces us the fact that the body is an organism; that it originates in a cell, is built up by the variously modified subdivisions of this primitive parent, which persists through life and can be seen composing the various tissues, elaborating material or conducting the

ordinary functions. Just as the unicellular plant or animal is an individual, providing for its own existence out of the common store house of nature, putting forth its energy in obedience to an innate force and not as a mere automaton in response to external influence only, so must this personality be granted to each separate cell of a composite organism. This is the stand that Virchow insists upon (Archives, Vol. 100, Chap. 1, 1885), as against the extreme germ theory. Indeed, the eminent author quotes an authority who describes how the hostile parasite may be arrested in its career, taken into the body of a cell and there incontinently adjusted to the strengthening of the cellular commonwealth. It would be a discovery should it be found that bacteria, under normal conditions, serve as concentrated food in convenient parcels distributed by the blood current direct to the cell, thus economizing the general digestive function. Such a discovery would much enlarge our views upon the vastness of cosmic resources. Virchow analyzes that most commanding illustration, Koch's tubercle bacillus. When the existence of this bacillus in phthisical patients was demonstrated many considered the whole complicated problem solved: Unity of the bacillus—unity of phthisis. Pulmonary tuberculosis is identical with cheesy hepatization; glandular tuberculosis with scrofula, etc. But, pulmonary phthisis remains as it was, a complicated process, beginning in very different ways; sometimes in the mucous membrane of the air passages, sometimes within the alveolæ, sometimes in the lung parenchyma. Thus entirely different products appear; the simple inflammatory, specific tubercular; "and he who wishes to comprehend them must learn something more than how to color bacilli. Yes, the bacillus has done so little for knowledge that shortly a return has been made to the investigation of predisposition and of immunity." Virchow adds that some of the expressions of the later writers sound so familiar that it is as though they had copied his own essays already a generation old. Recognition of a bacillus, he states, is but the first step in the full comprehension of morbid

processes; the behavior of the cell, after all, is the grand question. While the discovery of the presence and activity of these minute bodies is a great one and the value of its application is only developing, we can not afford to throw aside the accustomed views as to the nature of disease. The "germ theory" promises that with the discovery of the specific bacterium, bacillus, spirillum, the proper germicide will become known and the disease conquered; or, by inoculation, it will be altogether averted.

The cells composing the body have independent vitality inherited from the primordial cell; the energy of this life is set against that of the invading microbe cell, and the history of the train of events thus initiated must include that of both antagonizing factors, not that of the microbe alone.

TREATMENT OF WHOOPING COUGH.

In a clinical lecture at the Philadelphia Hospital, Dr. J. M. Keating gave an account of his mode of treating whooping cough, which seems to us worthy of notice.

In three cases recently treated he had the opportunity of making an observation as to the period of incubation of this disease. Three children, ranging in age from two to six and a half years, were exposed once by playing in a warm nursery with a playmate, who came to visit them while suffering from the disease, as yet unrecognized and supposed to be a simple bronchitis. Just two weeks later the three children were affected. The disease had continued for about three weeks when treatment was commenced, the children then having eight to ten severe paroxysms daily, their rest disturbed at night and the usual vomiting after meals. In a week after the treatment was instituted the cough had almost ceased in two of them and was greatly mitigated in the third.

Dr. Keating ordered the use, from four to six times daily, of the following as a spray:

℞ Ammon. bromid.,
Potass. bromid., - - - - - aa ℥j
Tr. belladonnæ, - - - - - - f ℥j
Glycerinæ, - - - - - - - f ℥j
Aquæ rosæ q. s. - - - - - ad ℥iv. M.

A tablespoonful of this with an equal quantity of "Listerine" was used with an atomizer (Snowden's No. 2).

In spraying the fauces and pharynx of children he recommends not to use a tongue depressor, as that causes gagging in most cases. He directs the child to open the mouth as wide as possible, and to breathe as deeply and rapidly as it can. This serves the double purpose of carrying the vapor into the larynx and of diverting the child's attention and so avoiding the reflex spasm of the arches of the pharynx. He directs to continue the spray, if possible, for a minute, then rest and repeat the process six or eight times at each treatment.

In cases where the secretion is scanty and tenacious it would be necessary, he says, to use the chloride of ammonium instead of the bromides, with four to six grains of crystallized carbolic acid to the four-ounce solution.

If the secretion is too profuse he would increase the proportion of belladonna or add alum to the solution.

The spray must be used thoroughly and frequently, and should be kept up for some time after the paroxysms have ceased.

In addition to the use of the spray, he used at evening, in order to secure unbroken rest, the following:

℞ Potass. bromid., - - - - - - - ℥j
Chloral hydrat., - - - - grs. xxiv.
Ext. carnis (Cibil's) - - - - - ℥iij. M.

Sig. Dessertspoonful in water at bedtime. Any reliable fluid meat extract can be used.

A cup of beef tea at night in this way not only affords the child

needed nutriment but serves as an admirable vehicle for the salty pungency of the medicine.

He also gave one grain of quinine, three times a day, in a dram of the syrup of yerba santa which he finds to be an excellent vehicle for the bitter drug when made without the resin.

Inasmuch as the use of the atomizer is difficult if not impossible with infants under a year of age; he depends more upon internal medication. He depends largely upon belladonna, which he gives in doses of two drops of the tincture three times a day to a child one year old, explaining to the mother what is expected from it. If the paroxysms are very severe at night, he would give three drops of it in a mixture with two grains each of bromide of potassium and chloral or a teaspoonful of lac asafetidæ.

The symptoms of belladonna poisoning are the dilated pupil, scarlatinous rash, and slowness of respiration.

In cases where the paroxysms are very severe, especially at night, he recommends the use of small doses of ipecac, as in the following:

℞ Tr. belladonnæ, - - - - - gtt. viij.
Vin. ipecac., - - - - - - ♏. xx.
Spts. etheris nitrosi, - - - - - ♏. xx.
Aquæ - - - - - - q. s. ad. ℥j. M.

Sig. A teaspoonful in an equal amount of sweetened water, and repeat in an hour if necessary.

He calls attention also to the importance of giving the child frequently a drink of water, sweetened, and with a little sodium bicarbonate, as it is constantly thirsty and its eagerness to nurse is likely to cause a paroxysm of coughing if the thirst is not thus allayed.

PUBLIC OPINION AND INTERNATIONAL SANITATION.

In view of the dreadful state of the seaports of France and Italy that served as depots for the cholera last year, the COURIER

pointed out the necessity for instituting an International Sanitary Congress that should have standing committees to investigate on the spot epidemics threatening to the health of other regions, and to make the causes and conditions so public that the local and national authorities should be compelled through this publicity to mend their ways, if reformation were demanded. As the general congress is still lacking, private enterprise has assumed the task in a limited way. The English being specially interested in the health of the winter resorts along the French and Italian Mediterranean coast, regions either directly ravaged in the recent and present cholera invasions, or threatened thereby, the *London Lancet* has a correspondent in the field to investigate and report. A series of valuable papers has been the result. This reporter related that practically nothing had been done in Marseilles and Toulon to put them in even a moderately decent condition of cleanliness in the plague-haunted districts. The filthiest of practices are openly tolerated, and the stench of their uncleanliness gives explanation sufficient for the return of the plague to those places which suffered so severely last year.

In the delightful Riviera, the grand English winter resort, the popular towns have been compelled, in their own interest, in order to secure that patronage, to put their houses in order, even to the extent of reforming the habits of their populace—some of which the travellers' eyes and nose have long and indignantly protested against—but, dolce far niente. One town under this outside pressure has actually gone so far as to provide privies for its destitute inhabitants, so that the open street need no longer be so made use of; private conveniences of that nature are generally lacking in that genial region.

Hyeres, which received hundreds of refugees from plague-stricken Toulon, adopted successfully such instant and stringent measures as these, ignoring the futile quarantine, except that personal effects were fumigated outside the town. Did a patient die, the room was fumigated for a day, the police locking the door. Then

a large coffin was brought and the body, together with as much as possible of the bedding and soiled linen, placed in it; the whole was covered with quicklime and immediately buried. The room was again fumigated and drains disinfected. Meantime the streets were daily washed with a hose and abundance of disinfectant used. Though at one time more than 1,000 refugees were lodged there, no evil resulted.

ANTIPYRINE.

At the Boston City Hospital careful experiments have been made with the new antipyretic, discovered by Prof. Knorr, of Erlangen.

In a small proportion of these cases and in a somewhat larger proportion of some of the German cases an eruption was produced, variable in character but strongly resembling that of measles.

Filehne, who made the first clinical experiments with this drug, as he had done also with kairine, recommended the use of the drug in three hourly doses of two grammes (ʒss) each. In the Boston Hospital the drug was sometimes given in the manner recommended by Filehne; sometimes only one full dose of two grammes was followed by two doses of one gramme each.

In intermittent fever antipyrine was found of no avail. In a case of sunstroke the temperature of the patient, when brought into the hospital at 5.30 P. M., was 107°. At 5.40 a hypodermic injection of two grammes (ʒss.) of antipyrine was given. At 6 o'clock the temperature had fallen to 103.5°; at 6.10 it was 100.3°; at 6.30 it was 99.2°, and at 6.50 it had fallen to the normal temperature.

The fall in temperature, it was found, ordinarily commences about an hour after giving antipyrine, and the maximum effect is reached in three to five hours after the full dose of six grammes (in three divided doses) has been given and continues for about eight hours—sometimes longer.

From the result of these observations, Dr. Geo. B. Shattuck, in the *Boston Medical and Surgical Journal*, endorses antipyrine as:

1. An efficient and reasonably safe antipyretic, without antiperiodic qualities.

2. One whose administration in proper doses is, as a rule, unattended by serious discomforts and drawbacks.

3. One which, by reducing a high temperature, substitutes frequently calm for excitement and sleep for restlessness.

4. One which does not, in other respects, modify the course of the disease, certainly not that of typhoid fever.

FRESH AIR MISSION AND THE AUGUSTA FREE HOSPITAL FOR CHILDREN.

The first excursion upon the river for the purpose of giving a change of air and temperature to the drooping children of the city took place this year upon the 30th of July and has been succeeded by others at intervals of a few days up to the time of writing.

This charity has been very successful in its appeal to the sympathy of the public. Its managers of former years immediately offered their co-operation as before. Dr. Kingsley, director and treasurer, secured, upon organization this year, the aid of the ladies of the Augusta Free Hospital, who, owing to several untoward circumstances, are not this summer engaged in their expected work. These ladies are associated with the older workers of the mission, in an executive committee, and, besides assisting upon the excursions with physicians of their Hospital, have succeeded in collecting several hundred dollars for the necessary expenses.

The prompt liberality of the citizens of St. Louis in contributing money for the work, some of them sending it from remote places of summer resort where they have taken refuge from the excessive heat, is a most cheering proof of the sympathy of the prosperous with their less fortunate fellow citizens.

It is estimated that five thousand passengers have been taken upon the first four excursions and it is expected the Mission will continue for six or eight weeks longer.

The friends of the Augusta Free Hospital will be pleased to learn that notwithstanding the unfavorableness of the times and the weather, a large sum of money has been recently collected and building operations begun. As in the Post-Graduate College, the pavilion ward has been adopted as affording the most approved hygienic conditions. At present, however, only the administrative building will be completed upon beautiful plans selected after much deliberation. This building will give excellent temporary accommodations, at low running expenses, to more patients than are housed in similar institutions for sick children in this city.

Why do we continue to lavish large sums of money upon costly monuments in the seclusion of Bellefontaine, when beautiful charities in our city give wide scope for memorials, both useful and of the highest art, to keep green the memory of the departed?

TOPICAL USES OF EARTH.

For a number of years Dr. Adinell Hewson, of Philadelphia, has made use of topical applications of earth. The disinfectant properties of earths had been demonstrated by others. Dr. Hewson found that these earths, especially clay, possessed positive antiseptic as well as antiphlogistic and antipyretic qualities. After various experiments he found that the earth best adapted to surgical use is clean yellow clay free of all sand and grit.

In a paper in the July Medical Bulletin he related the results of the use of clay as a dressing in erysipelas, small-pox, measles and scarlet fever. He states that in all cases of either of these four diseases which have come under his care since 1872, he has invariably used these applications and has always noticed thereafter:

1. A direct and rapid reduction of temperature.

2. An allaying, or, more positively, a dissipation of pain or distressing local sensations.

3. A shortening of the course of the disease.

4. An allaying of the severity of the constitutional symptoms of the disease.

5. The prevention of complications.

6. The destruction of contagiousness.

In scarlatina, rubeola and roetheln he dusts the powdered clay over the surface. In erysipelas and small-pox he applies the clay in the form of a smooth paste made by mixing it with water. The reduction of temperature in the first period of twenty-four hours after the first application of the clay has always been most marked in measles, next in erysipelas, scarlet fever and least in small-pox.

The alleviation of the pain, he says, has always been most decisive.

He recites the details of some cases illustrating his use of the clay as a dressing and showing the facts already enumerated, and also showing it to be most valuable and efficient as a means for the prevention of pitting of small-pox.

Medical and Surgical Society of Western Illinois.—The regular quarterly meeting of the Medical and Surgical Society of Western Illinois was held at the court house in Jerseyville, Aug. 4th, six counties being represented.

The morning session was principally devoted to the transaction of business, and the afternoon to the consideration of papers presented.

Of these there were two. Dr. Armstrong, of Carrollton, under the title of "The Mother," gave a résumé of his treatment of the pregnant and puerperal woman.

Dr. W. C. Day, of Winchester, read an able and exhaustive article on Asiatic Cholera.

Both papers aroused animated discussion.

Resolutions were adopted memorial of Drs. J. M. Davis and L. H. English, members of the Society, lately deceased.

The next meeting was appointed at Whitehall, Nov. 3rd.

G. W. Ross, Secretary.

Carrollton, Ill., Aug. 7th, 1885.

BOOK REVIEWS AND NOTICES.

A TREATISE ON ASIATIC CHOLERA. Edited and Prepared by EDMUND CHARLES WENDT, M. D., etc., in Association with DRS. JOHN C. PETERS, ELY MCCLELLAN, JOHN B. HAMILTON and GEORGE M. STERNBERG. Illustrated with maps and engravings. *New York:* WM. WOOD & Co. 1885. 8vo.; pp. 403; cloth. (Wood's Library.) (St. Louis Stationery and Book Co.)

A very timely volume is this May number of Wood's Library for 1885. No other subject is of so much importance to physicians at present as is all that can be learned concerning the terrible disease which is prevailing so severely in Spain and has gained a foothold in France, and apparently now in England.

Those who were associated in the preparation of this volume have done their work ably and well. Of course, in discussing problems, many of which are yet far from being settled, we would not expect that absolutely identical views would be held by several different independent observers and thinkers, and we find here some diversities in opinion on various points.

Part first, comprising the first seventy pages, is a history of Asiatic Cholera, prepared by Dr. John C. Peters, of New York, one of the ablest students of epidemiology in this country, and also a history of its effect upon the United States Army, prepared by Dr. Ely McClellan, U. S. A., and cholera on shipboard, a chapter consisting of memoranda furnished by the Bureau of Medicine and Surgery.

Parts Second, Third, Fourth and Fifth were prepared by Dr. E. C. Wendt. Part second discusses the etiology of cholera. The doctor does not consider Koch's doctrine to be fully established as yet, but sees much in its favor. In part third he describes the symptomatology, course, duration, mortality, complication and sequelæ of cholera. In part fourth he considers the morbid anatomy and pathological history of cholera; and in part fifth he gives the diagnosis and prognosis, methods of bacterioscopy and preparation of pure cultures.

Part sixth, which treats of the prevention of cholera, is divided into three sections. The first of these was prepared by Dr. Geo. M. Sternberg, and is entitled "The Destruction of Cholera Germs." Section second, The Prevention of the Spread of Cholera, is from the pen of Dr. John B. Hamilton; and section third, Cholera Hygiene as applied to Military Life, is written by Dr. Ely McClellan.

Dr. Wendt considers the treatment of cholera in the last two chapters, the last of which discusses special methods of treatment and protective inoculation.

The cautious words of warning against relying upon any such prophylactic inoculation as that proposed and practised by Ferran have been much more than confirmed by the recent reports with regard to that stupendous piece of charlatanry.

This volume is one of the most valuable of the many valuable works that have been embraced in the successive series of "Wood's Library."

MINOR SURGICAL GYNECOLOGY. A Treatise of Uterine Diagnosis and the Lesser Technicalities of Gynecological Practice, Including General Rules for Gynecological Operations and the Operation for Lacerated Cervix and Perineum, and Prolapsus of Uterus and Vagina; for the Use of the Advanced Student and General Practitioner. By PAUL F. MUNDE, M. D., etc. Second Edition, Revised and Enlarged. With three hundred and twenty-one illustrations. *New York: William Wood & Co.*, 1885. 8vo.; pp. 552; cloth.

The first edition of this work was prepared for the Wood's Library for 1880, and was then regarded as a very valuable contribution to the literature of the specialty, not in any important advances which it suggested or initiated, but in the tact which the author showed in bringing together clear instructions as to the technique of the special manipulations and operations of gynecological practice.

In this second edition Dr. Mundé has considerably enlarged the volume, and has added about a hundred pages, in which he discusses gynecological operations in general, and more particularly and fully those for laceration of the cervix uteri for lacerated perineum, rectocele, cystocele, and prolapsus of the uterus and vagina.

It is a most valuable volume for the library of the general practitioner, and those who have had a considerable experience in treating diseases of women will still find many useful and practical suggestions as to methods of manipulation.

Gout in its Protean Aspects. By J. Milner Fothergill. M. D., etc. *Detroit, Mich.: Geo. S. Davis.* 1883. Small 8vo.; pp. 303; cloth. (St. Louis: J. H. Chambers & Co.)

Dr. Fothergill wields a facile pen and in this volume he gives us, in well-chosen language, the result of his wide experience and extensive observation as to the numberless manifestations of gout. It was formerly considered that this disease was one with which American practitioners had very little to do; but as the years go on it has appeared that more of our people are affected by it; and certainly there are many who suffer from some of the latent manifestations of the same virus which are described here by our author. The book is one which can be read with profit as well as pleasure.

Surgical Delusions and Follies. A Revision of the Address in Surgery for 1884 of the Medical Society of the State of Pennsylvania. By Jno. B. Roberts. A. M., M. D., etc. *Philadelphia: P. Blakiston, Son & Co.* 1884. 12mo.: pp. 55: cloth. (St. Louis: J. H. Chambers & Co.)

The address which forms the larger part of this little volume was published in a number of the medical journals in different parts of the country. It is an eminently practical discussion of some points which are worthy the notice of every practitioner who has little or much to do with surgery. Dr. Roberts has done a service to the profession in calling attention to these matters.

Cholera: Its Origin, History, Causation, Symptoms, Lesions, Prevention and Treatment. By Alfred Stille. M. D., LL. D., etc. *Philadelphia: Lea Brothers & Co.* 1885. 12mo.; pp. 164; cloth.

This little volume from the pen of the distinguished Philadelphia professor contains a brief summary of the history of cholera; a consideration of its etiology, symptomatology, complications and sequelæ, morbid anatomy and pathology, diagnosis, prognosis, prevention and treatment.

In considering the causes of cholera he says: "There is not the slightest evidence that these agencies [poverty, crowding, filth, intemperance and depression of spirits] singly or combined, can generate cholera, or favor its spread, apart from the presence of the specific poison of the disease, and the facility with which it is transmitted from the sick to the well whenever the population is crowded, poor, of filthy habits and weakened by dissipation. * * * Apart from the brutish mode of living of drunkards, there

is nothing to show that they are more liable to cholera than the most abstemious of water-drinkers." Later he remarks that "A specific choleraic diarrhea is as infectious as the evacuations which occur in completely developed cholera." He regards cholera as emphatically a contagious disease, communicable from the sick to the well. "The essential cause of cholera is unknown, unless the investigations of Koch * * * may have revealed it;" and later (vid p. 95) we find: "They [certain experiments and observations] are sufficiently harmonious to warrant the belief that the essential cause of cholera is not the comma bacillus.

With regard to the prevention of cholera, Dr. Stillé is a firm believer in the efficacy of quarantine, in the possibility of successfully stamping out the disease by proper measures taken at the appearance of first cases, and speaks most emphatically in condemnation of the mercenary spirit which too manifestly sets the interests of commerce before those that concern human life.

In regard to treatment he lays the strongest emphasis, as do all writers, upon the importance of immediate attention to the earliest symptoms and the necessity of rest in a recumbent posture whenever symptoms of the disease appear.

A TEXT-BOOK OF PRACTICAL MEDICINE. Designed for the Use of Students and Practitioners of Medicine. By ALFRED L. LOOMIS, M. D., LL. D., etc. *New York: William Wood & Co.* 1884. 8vo.; pp. 1104; sheep.

This book, the author informs us, is both in text and illustration practically a revision, an elaboration of lectures given during the past eighteen years from his professorial chair.

The illustrations are in great part original, and, altogether, the book seems to us calculated to maintain a high position as a representative of contemporary American Medicine.

Therapeutics, as well as descriptions of diseases, are quite fully considered, and the busy practitioner will find it of great value for ready reference in cases over which he is deliberating.

It would be difficult and prolix to enter upon a just notice and criticism in details of a book which treats of diseases of the respiratory organs, of the digestive and circulatory systems and of general medicine, and we will only say that we have found it, upon examination, to be both interesting and instructive; and, although we might not agree with all the opinions given, we have closed the

book with the feeling of having consulted with a clever physician.

General practitioners will do well to buy this book, as will also specialists for information outside their own branches.

C. E. B.

A System of Practical Medicine. By American Authors. Edited by William Pepper, M. D., LL. D., etc. Assisted by Louis Starr, M. D. Volume I. Pathology and General Diseases. Volume II. General Diseases (continued) and Diseases of the Digestive System. *Philadelphia: Lea Brothers & Co.*, 1885. 8vo.: pp. 1094: sheep. (*St. Louis: E. Holdoway & Co.*, 607 N. 7th St.)

No other medical work of equal value with this "System of Medicine," edited by Dr. Pepper, has been published in many a year.

We expected it would be most excellent, and we are in no way disappointed. The announcement some time ago of the plan of the work and the names of those who had promised to contribute to it, lead us to look forward to the issue of the several volumes with great interest, and the satisfaction with which we have examined these two volumes warrants the confident expectation that the others of the set will equally well sustain the promises of the publisher and editor.

It is impossible even to attempt to give an analysis of the several papers which these volumes contain. To compare the work of the different writers would not be profitable. Each paper bears the evidence of having been written by a man who is master of his subject.

Under the heading of General Pathology and Sanitary Science are essays by Reginald H. Fitz, M. D., on General Morbid Processes; by Henry Hartshorn, on General Etiology, Medical Diagnosis and Prognosis; by John S. Billings, M. D., on Hygiene, one of the ablest papers on this subject that has ever been published; and one by Geo. E. Waring, Jr., on Drainage and Sewerage in their Hygienic Relations.

Simple continued fever, typhoid fever and typhus fever are the first three of the general diseases which are considered, and are thoroughly discussed by Dr. James H. Hutchinson. Relapsing fever is described by Dr. Pepper. Dr. James N. Hyde discusses variola, varicella and erysipelas, while vaccinia is presented by Dr. Frank P. Foster. Dr. J. Lewis Smith gives a very full and exhaustive treatise on scarlet fever.

Dr. Hardaway's papers on rubeola and roetheln are admirable in their concise and graphic delineation of these morbid conditions.

Dr. Samuel Bemiss contributes brief essays on Malarial Fevers and Yellow Fever. Dr. James M. Keating writes on Parotitis and Pertussis. Dr. Jacobi's monograph on diphtheria is a very complete study of that disease. Dr. Stillé's article on Cholera has been reproduced in the form of a separate volume, which we notice on another page of this number of the Courier. He also gives the article on epidemic cerebro-spinal meningitis. Dr. Jas. C. Wilson treats of the plague and influenza. The account of leprosy is from the pen of Dr. Jas. C. White; that of dengue is by Dr. H. D. Schmidt. The articles on Rabies and Hydrophobia, Glanders and Farcy, and Anthrax are prepared by James Law, F. R. C. V .S. Dr. B. A. Watson discusses Pyemia and Septicemia; Dr. W. T. Lusk, Puerperal Fever, and Dr. D. B. Simmons, Beriberi.

Volume II. continues the consideration of general diseases. In this volume we find a long treatise on Rheumatism by Dr. R. Palmer Howard; shorter ones on Gout, by W. H. Draper; on Rachitis, by Dr. A. Jacobi; on Scurvy by Dr. Philip S. Wales; on Purpura, by Dr. I. E. Atkinson; on Diabetes Mellitus, by Dr. Jas. Tyson; on Scrofula, by Dr. John S. Lynch, and on Hereditary Syphilis, by Dr. J. W. White.

Then follow the Diseases of the Digestive System, among which are papers by Dr. J. Solis Cohen on Diseases of the Mouth and Tongue, of the Tonsils, of the Pharynx and of the Esophagus. Dr. S. G. Armor discusses Functional and Inflammatory Diseases of the Stomach. Dr. H. H. Welch furnishes papers on simple Ulcer, Cancer, Hemorrhage and Dilatation of the Stomach, and also on Minor Organic Affections of the Stomach. Dr. W. W. Johnston considers Intestinal Indigestion, Constipation, Enteralgia, Acute and Chronic Intestinal Catarrh and Cholera Morbus. Intestinal Affections of Children in Hot Weather is from Dr. J. Lewis Smith's pen, and Pseudo-Membranous Enteritis from that of Dr. Philip S. Wales.

Dr. J. T. Whittaker contributes the articles on Dysentery, Typhlitis, Perityphlitis and Paratyphlitis, Intestinal Ulcer and Hemorrhage of the Bowels; Dr. Hunter McGuire, that on Intestinal Obstruction. Dr. I. E. Atkinson gives the paper on Cancer and Lardaceous Degeneration of the Intestines. The subject of Diseases of the Rectum and Anus is presented in a joint paper by

Drs. T. G. Morton and H. M. Wetherill, Jr. Dr. Joseph Leidy summarizes our present knowledge concerning Intestinal Worms, while the most extended contribution from any single author is that by Dr. R. Bartholow, on Diseases of the Liver. Dr. Louis Starr's contribution to this volume is a discussion of Diseases of the Pancreas. Dr. Alonzo Clark gives his views on Peritonitis; and Dr. S. C. Busey treats of Diseases of the Abdominal Glands (Tabes Mesenterica).

Time has not allowed as careful perusal of the second volume as we have given to the first, but so far as we have been able to examine, there is the same careful, thorough work apparent all through.

The publishers have done their part of the work admirably. The typography, paper and binding are all excellent. Each physician has to consider with reference to this work, not whether he can afford to purchase it, but whether he can afford to get along without it.

THE PHYSICIAN HIMSELF. By D. W. CATHELL. Fourth Edition. *Baltimore: Cushings & Bailey.* 1885. 8vo.; pp. 283; cloth.

This fourth edition of Dr. Cathell's book is somewhat enlarged. It contains a good many helpful suggestions, a few which perhaps are questionable in their tendency.

TRANSACTIONS OF THE LOUISIANA STATE MEDICAL SOCIETY at its Seventh Annual Session, held at New Orleans, La., April 21, 22 and 23. 1885. 8vo.; pp. 184; paper.

This is a well printed volume of transactions. Some of the papers are of very considerable value. We note especially the first two. viz.: "The Relationship of the Teeth to the General System," by A. G. Fredricks, M. D., and "The Long Continued Fevers of Louisiana which Resist Quinine," by Rudolph Matas, M. D.

TRANSACTIONS OF THE NEW YORK STATE MEDICAL ASSOCIATION for the year 1884. Volume I. Edited for the Association by AUSTIN FLINT, Jr., M. D., of New York County. *New York: D. Appleton & Co.*, 1885. 8vo.; pp. 654; cloth, gilt top; $5.00.

This volume, with its fifty-one papers on scientific subjects, is one of much greater interest than we have generally found to be the case with volumes recording the transactions of medical societies. Some of the papers are of very great value. Among these we would note particularly Dr. Hyde's "Notes on Dislocation of the Hip;" Dr. Carroll's investigation "On the Duration of Contagiousness after Acute Infectious Diseases;" Dr. Flint's "Dietetic

Treatment of Dyspepsia;" Dr. Gray's "A Few Hints on the Prevention of Insanity."

The volume is handsomely printed on laid paper, with the top of the leaves gilded, and is a credit to the new association.

MEDICAL SOCIETY OF THE STATE OF TENNESSEE—Transactions 1885. 8vo.; pp. 144; paper.

This is a very presentable volume of transactions. The "essays and addresses," which occupy a little less than half of the volume, include a number of quite interesting papers. Perhaps the most important part of the volume is found in the account of the proposed and the amended bills regulating the practice of medicine in the State.

BOOKS AND PAMPHLETS RECEIVED.

Cholera: Its Origin, History, Causation, Symptoms, Lesions, Prevention and Treatment. By Alfred Stillé, M. D., LL. D., etc. Philadelphia: Lea Brothers & Co., 1885. 12mo.; pp. 164; cloth.——The Treatment of Opium Addiction. By J. B. Mattison, New York and London. G. P. Putnam's Sons. 1885. 12mo.; pp. 49; cloth; 50 cents.——Cancer. A Study of Three Hundred and Ninty-Seven Cases of Cancer of the Breast with Clinical Observations. By Willard Parker, M. D. New York and London: G. P. Putnam's Sons. 1885. 8vo.; pp. 102; cloth; $1.50.——Architecture Simplified.——Fifty Cases of Abdominal Section, with Remarks on Laparotomy. By Jas. B. Hunter, M. D. (Reprint from New York Medical Journal.)——Ovariotomy. By James B. Hunter, M. D. (Reprint from New York Medical Journal.) Year-Book of Treatment for 1884. Philadelphia: Lea Brothers & Co. 1885. Small 8vo.; pp. 316; cloth.——The Oleates. By John V. Shoemaker, A. M., M. D. Philadelphia. F. A. Davis, Attorney. 1885. 12mo., pp. 121; cloth——The Diaphragm. By J. M. W. Kitchen, M. D. 8vo.; pp. 101; flexible cloth, $1.00. ——Therapeutics of Diseases of Children. By Joseph F. Edwards, M.D., Philadelphia. D. G. Brinton. 1885. 8vo.; cloth.——Asiatic Cholera. Edited and prepared by Edmund Charles Wendt, M. D., etc., in association with Drs. John C. Peters, Ely McClellan, Jno. B. Hamilton and Geo. M. Sternberg. Illustrated with Maps and Engravings. New York. Wm. Woods & Co. 1885. 8vo.; pp. 403; cloth. (Wood's Library.) (J. H. Chambers & Co.)——Science and Practice of Midwifery. By W. S. Playfair, M. D., F. R. C. P., etc. Fourth American from the Fifth English Edition. With Notes and Additions by R. P. Harris, M. D. With three Plates and Two Hundred and One Illustrations. Philadelphia: Lea

Brothers & Co. 1885. 8vo.: pp. 663: sheep.——Announcement of the Twenty-Sixth Annual Course of Instruction at the Miami Medical College of Cincinnati. Constitutional Treatment of Caries and Necrosis. By Hal C. Wyman, M. D.——Annual Announcement of the College of Medicine of the University of Southern California for 1855.——Transactions of the Medical Society of the State of Tennessee. 1885. Fifty-second Annual Meeting.——An Anomalous Human Lung having Four Lobes on the Right Side. By William A. Edwards, M. D. (From American Journal of Medical Sciences.)——Twenty-Fifth Annual Announcement of the Bellevue Hospital Medical College.——Deviation of the Nasal Septum. By J. W. Gleitsman, M. D. (From the American Journal of Medical Sciences.)——Laryngeal Hemorrhage. By G. W. Gleitsman, M. D. (From American Journal of Medical Science.) ——Surgical Notes from the Case-Book of a General Practitioner. By Wm. C. Wile, M. D. (Reprint from New England Medical Monthly.)——American Journal of Education.——Urinary and Renal Diseases, including Urinary Deposits. By William Roberts, M. D., F. R. S., etc., etc. Assisted by Robert Maguire, M. D., Lond., etc. Fourth Edition. Philadelphia: Lea Brothers & Co. 1885. 8vo.; pp. 628: cloth. (St. Louis: J. L. Boland.)——Practical Chemistry and Qualitative Inorganic Analysis. By Frank Clowes, D. Sc., Lond., etc. With Illustrations. From the Fourth English Edition. Philadelphia: Lea Brothers & Co. 1885. 12mo., pp. 376: cloth. (St. Louis: J. L. Boland.)——Guide to the Diseases of Children. By J. F. Goodhart, M. D., F. R. C. P. Philadelphia: Blakiston, Son & Co. 1885. 8vo.: pp. 738: cloth, $3.00; sheep, $4.00. (J. H. Chambers & Co.)——Urinary and Renal Disorders. St. Louis. By Lionel S. Beale, M. D. Philadelphia: P. Blakiston, Son & Co. 1885. 8vo.; pp. 356: cloth, $1.75. (J. H. Chambers & Co.)——Diseases of the Eye. Von Arlt. Translated by Ware. Philadelphia: P. Blakiston, Son & Co. 1885. 8vo.; pp. 825; cloth, $2.50. (J. H. Chambers & Co.)——Watson on Amputations. By B. A. Watson, A. M., M. D. Philadelphia: P. Blakiston, Son & Co. 1885. 8vo.: pp. 762: cloth, $5.50. (J. H. Chambers & Co.)——Annual Announcement Atlantic Medical College, 1885-86.——Suersen's Obturators. By Dr. Th. Weber. (Reprint from Independent Practitioner.)

Alcohol Incompatible with Chloral Hydrate.—Geo. F. H. Markoe states that he has found by careful experimentation that when alcoholic preparations are combined with hydrate of chloral, especially in connection with the bromides of potassium and sodium, a separation is likely to occur in the mixture, the chloral separating as an alcoholate, and floating on the surface, thus causing danger of giving an overdose.—*Am. Jour. of Pharm.*, Aug., '85.

REPORTS ON PROGRESS.

SURGERY.

Lemon Injection for Gonorrhœa.—Rebatel favors the use of a decoction of lemon in the treatment of urethritis. He directs three fresh lemons to be sliced into about ten ounces of water, and boiled down to three ounces. With this fluid three or four injections are to be made daily. A fresh decoction should be made every second day. In lieu of this the following may be used :

℞ Acidi salicylici - - - - - - gr. j.
Acidi citrici - - - - - grs. xxv.
Aquæ - - - - - - - ʒ viij. M.
Sig. Two injections daily.

—*Ann. de Syph.*; *N. Y. Med. Jour.*, June 6, '85.

Rupture of Bladder and Intestine.—Dr. R. P. Huger reports the following remarkable case of injury:

C. C., German, of medium size and in good health, with the exception of a double inguinal hernia, in wrestling with a friend was thrown, and the friend, who was a young fellow about eighteen years old and weighed 135 pounds, fell upon him in such a manner that his hip struck C. upon the abdomen. After getting up C. complained of pain, but walked about a hundred yards to a store. In a short time he became nauseated and made ineffectual attempts to vomit. About three hours later he was given a dose of morphine and was carried home. During the night he suffered intensely, and vomited frequently, and at 4 A. M. his physician was summoned. The abdomen was exceedingly tender, pulse very weak, extremities cold. Both herniæ were down. He complained of pain, especially in the region of the bladder. The herniæ were reduced; a catheter was passed and a little bloody urine was drawn

off, and as these measures afforded little relief, morphine was administered hypodermically.

At 9 A. M., Dr. H. was called in consultation. Patient was in collapse, mind clear, suffering great, pulse barely perceptible, breathing thoracic and labored, countenance anxious, surface cold and cyanotic, abdomen distended and exquisitely sensitive, stomach extremely irritable. Morphia was ordered as necessary to control pain; hot fomentations, stimulants, and warm external applications.

At 3 P. M. he began to vomit blood. This continued until 6 P. M., when he died.

Autopsy showed no external evidence of violence, but upon section there were signs of recent peritonitis which had advanced to the purulent stage. There was a rupture in the ileum large enough to admit the index finger. There was also a considerable rupture of the anterior wall of the bladder.—*Atlanta Med. and Surg. Jour.*, Aug. 1885.

Antiseptic Ointment.—Dr. M. B. Ward commends the following formula for an antiseptic ointment. It has been thoroughly tested in a warm climate, that of Mexico, and gave excellent satisfaction. Spread upon a sheet of absorbent cotton it seemed to be admirably adapted to the after treatment of amputation wounds.

℞ Iodoformi, - - - - - - - - ʒj.
Bismuth subnit., - - - - - - ʒvij.
Vaselini, - - - - - - - - ʒij. M.

Another formula suggested by Dr. Thayer is

℞ Iodoformi, - - - - - - - - ʒj.
Acid boracici, - - - - - - - ʒij.
Bismuth subnit., - - - - - - - ʒiv.
Vaselini, - - - - - - - - ʒij. M.

—*Med. Rec.*, July 18, 1885.

Wiring the Patella.—F. C. Fuller reports one successful case of wiring a fractured patella. Robert T. Morris reports three cases. In two cases the patella had been ruptured by muscular action or by a blow. In the third he divided the patella in operating upon a diseased knee-joint. In this last, and in one of the others, the result was satisfactory. In the other there was a permanent stiffness of the joint left a year afterwards.—*Med. Rec.*, July 18, 1885.

Deviation of the Nasal Septum.—DR. J. W. GLEITSMANN, of New York, in an instructive paper on deviation of the nasal septum, points out the different important functions performed by the nose in the human economy, and the results of interference with these functions. The upper part of the nasal cavity, the olfactory region, presides over the sense of smell, whilst the lower one, the respiratory region, is the normal way for the air during the act of respiration. Interference with this natural channel leads to mouth-breathing with its manifold subsequent evils. When the air passes through the nose, it is not only cleansed and moistened but it also reaches the lungs much warmer than when breathing is going on by the mouth. Nasal respiration with closed lips further exerts a negative pressure of two to four milligrames mercury in the oral cavity, by which the tongue is drawn to the hard palate, and the muscular action, maintaining the position of the lower maxilla, greatly assisted. The nose also acts the part of a resonant chamber for the human voice, and nasal obstruction imparts to it the so-called dead character, described in Meyer's paper on adenoid vegetations. Finally, it is due to the anatomical relations of the nose to the eye and ear that cases of catarrhal conjunctivitis, lachrymal fistula, frequently only heal when coexisting nasal affections are relieved, and that the latter are, in an overwhelming number of instances, productive of aural disease often of the severest kind. Aside from the symptoms of nasal stenosis in a greater or less degree, deviations of the septum, Dr. Gleitsmann points out, are apt to cause disfigurement of the face, and also have some relation to the bony structures of the head, which he fully explains. The pathology, etiology, symptomatology, and treatment of these deviations is fully discussed.—*Amer. Jour. Med. Sciences*, July, 1885.

Nephrectomy, its Indications and Contraindications.—DR. SAMUEL W. GROSS, in an elaborate paper based upon the study of nearly four hundred and fifty cases of different operations on the kidney, presents a careful analysis of all the facts pertaining to the surgery of this organ, and arrives at the following conclusions:

1. That lumbar nephrectomy is a safer operation than abdominal nephrectomy.

2. That primary extirpation of the kidney is indicated, first, in sarcoma of adult subjects; secondly, in benign neoplasms at any

age; thirdly, in the early stages of tubercular disease; fourthly, in rupture of the ureter; and lastly, in ureteral fistula.

3. That nephrectomy should not be resorted to until after the failure of other measures: first, in subcutaneous laceration of the kidney; secondly, in protrusion of the kidney through a wound in the loin; thirdly, in recent wounds of the kidney or of the ureter, inflicted in the performance of ovariotomy, hysterectomy, or other operations; fourthly, in suppurative lesions; fifthly, in hydronephrosis and cysts; sixthly, in calculus of an otherwise healthy kidney; and, finally, in painful floating kidney.

4. That nephrectomy is absolutely contraindicated, first, in sarcoma of children; secondly, in carcinoma at any age, unless, perhaps, the disease can be diagnosticated and removed at an early stage; and, thirdly, in the advanced period of tubercular disease.—*Am. Jour. Med. Sciences*, July. 1885.

Tapping for Pleuritic Effusion; *Paracentesis in Abscss of the Liver, a pint and a half of Pus Evacuated with Recovery.*—Dr. F. Peyre Porcher, of Charleston, urges unusual care and watchfulness in *searching* for the presence of pleuritic or pericardial effusion, whenever dyspnea and oppression exist; and even when absent, for they are not essential symptoms. He believes that this diseased condition is extremely frequent, and that often it is not recognized and remedied. To discover the existence of fluid in the thoracic cavity is a comparatively coarse procedure; and though it may presuppose some experience and practice, does not call for the exercise of any special refinement in auscultation and percussion: whereas to detect pericardial effusion is far more difficult, and requires exceeding nicety and skill in diagnosis.

The relief afforded in such cases by early, judicious, and, when necessary, repeated tappings is most marked. How salutary, he asks, must be the removal of pints or quarts of serous or sero-fibrinous effusions by the formation of which the blood had been robbed of its most important elements, which had been compressing the lungs, disturbing the heart, impairing the power of absorption and the normal functions of the organs in every region of the body; or which, passing by diapedesis into neighboring structures, as the pericardial sac, or even into the abdominal cavity, were mining the foundations, as it were, of the very citadels of life.—*Amer. Jour. of Med. Sciences*, July, 1885.

A Case of Cholecystotomy.—DR. CHARLES T. PARKES adds a very instructive case to the list of operative procedures for the relief of obstruction of the biliary ducts. The entire number of reported operations falls within fifty.

Of the operations, by far the larger portion has been of cholecystotomy, by means of which a distended gall-bladder has been positively relieved, and in most of them the cause of obstruction, retained gall-stones, removed. In a few no gall-stones were found, while in others the cause of the obstruction could not be remedied.

In Dr. Parkes's case the gall-stones were not lodged in the gall-bladder, and it is highly probable that they were retained in some of the dilated hepatic ducts, and were washed into the cyst by the flow of biliary fluid which came on immediately after the formation of the fistula. He is inclined to believe that they had but little to do with preventing the flow of bile into the intestine, at least the patulency of the passages was not restored by their removal. The remarkable and profuse flow of muco-biliary fluid, coming through the sinus established, argues very strongly in favor of the operation which contemplates the formation of a fistula in the gall-bladder in distension thereof by confined secretions. Certainly no tube of the dimensions of the ductus communis choledochus could have given a free exit to the secretions; at least the accompanying back pressure on the walls of the cyst would have greatly endangered, if not certainly destroyed, the adhesions in any recent wound thereof, even when protected by the continued suture. Most of the cases of reported cholecystotomy tell of the presence of a freer flow through the fistula, so that it is a condition to be expected, and makes immediate closure of the bladder wound without drainage a dangerous proceeding to adopt, even if we can be positively sure of a clear common duct.

Dr. Parkes, in conclusion, advises, from his experience in this case, the general practice of sounding the common duct through the external opening. He is quite sure that such procedure can be safely carried out, and equally certain that its adoption in his case resulted in relief that did not follow the removal of the calculi alone.—*Amer. Jour. of Med. Sciences*, July, 1885.

MEDICINE.

Paraldehyde as a Hypnotic.—G. F. Hodson has used this agent largely and regards it as a very valuable medicine. The sleep produced by it closely resembles natural sleep, and has no unpleasant premonitory or after effects, and its action is prompt. It is superior to chloral in that it has no depressing effect upon the heart. He thinks it appropriate to any case where hypnotic action is desired. Its anodyne effect is slight. Its action is principally upon the cerebrum and partially on the medulla.

In irritable or inflamed conditions of the throat and stomach its acridity is pretty sure to aggravate the symptoms, and in all cases it should be fully diluted.

He recommends the following formula:

℞ Pulv. tragac. co. - - - - - ℥j.
Syr. aurantii, - - - - - - - ʒiv.
Paraldehydi, - - - - - - - ʒj.
Sp. chloroformi, - - - - - - - ♏. xv.
Aquam, - - - - - - - ad ʒiij. M.

Sig. Take as a dose. This may be repeated in an hour or so if necessary.—*Brit. Med. Jour.*, July 18, 1885.

Antipyrine in Sunstroke.—Benj. F. Westbrook reports the successful use of antipyrine in two cases of sunstroke in which there was extreme hyperpyrexia, in one case 109° F., in the other 110° F. Both cases were characterized by grave nervous disturbances, violent convulsions. One dram of a fifty per cent. solution of the drug was injected hypodermically with the effect of a rapid reduction of the temperature. In one case ice cold applications were also made to the general surface; in the other cold was applied only to the head. Dr. W. is inclined to give considerable credit for the successful result to the use of the antipyrine. —*N. Y. Med. Jour.*, July 25, 1885.

Chloral Treatment of Chorea.—Prof. Joffroy states that since 1879 he has used chloral in the treatment of chorea with the highest satisfaction. He now gives it three times a day, one gramme (grs xv) at morning and noon and two grammes at night to children over ten years. For children six to eight years old, he would give not exceeding three grammes (grs. xlv) in twenty-four hours. He aims to secure sleep within fifteen minutes after each

dose, or at any rate the night dose, and to keep the child asleep a considerable part of the time for two weeks to two months until completely cured. In order to make the chloral palatable a saturated solution (nearly four grammes to one of water) of pure chloral is mixed with rather thick gooseberry jelly, so that a teaspoonful will represent a gramme (grs. xv) of the chloral, and children will take it readily. In severe cases he gives a cold (55° F.) wet pack twice a day.—*Phil. Med. Times*, July 11, 1885.

Tincture of Iodine in Diphtheria.—Dr. Edward Adamson states that he has treated fifty-five cases of diphtheria by the internal administration of the officinal tincture of iodine, and has come to value it most highly. He claims that it promotes the separation of the membrane, checks the formation of new exudation, lessens the secretion of offensive saliva, destroys the fetor of the breath and corrects the morbid condition of the fauces, tonsils, etc. In the course of thirty-six hours he says there is generally such marked improvement as to be apparent to the patient.

The dose for adults was five to seven minims every one or two hours; and for children six to twelve years old, two to three minims every two hours, in syrup of orange and water.—*Practitioner*, July, 1885.

Sedative Cough Mixture.—Dr. H. C. Wood recommends the following as the most efficient sedative cough mixture he has ever used:

℞ Potassii citratis, - - - - - - ℥j.
Succi limonis, - - - - - - ℥ij.
Syrup. ipecac., - - - - - - ℥ss.
Syrup. simplic., - - - - q. s. ad ℥vj. M.

Sig. A teaspoonful from four to six times a day.

When there is much cough or irritability of the bowels, he adds a sufficient quantity of paregoric.—*Therap. Gaz.*

New Method of Giving a Bath.—Dr. H. C. Wood offers the following suggestion as to a ready mode of giving a bath to fever patients. The canvas of an ordinary cot is to be made three or four inches wider than it is ordinarily arranged, and a board is nailed at each end so as to keep the cot permanently open. This cot is then placed alongside the bed of the patient so as to be on a level with the bed and at the same time firm. Over it spread an india-rubber cloth sufficiently large to cover it entirely and to fall above and below

over the head and footboard. The patient wrapped in a sheet is then slipped onto the cot. Of course the canvas sags down, and when water is poured over the sheet the patient lies half immersed in a pool. If the attendant is provided with two tubs, one containing water and one empty, and with a large bathing sponge the water in the pool heated by the body can be removed by the sponge and fresh cold water soused over the body enveloped in the sheet. In this way we secure the practical effect of the cold bath, and may rapidly reduce high temperatures.—*Therap. Gazette*, July, 1885.

Nitro-Glycerine a Substitute for Alcohol.—Joseph B. Burroughs suggests the use of nitro-glycerine in many cases where alcohol is usually administered as a stimulant. He states that he has so used it to relieve the nausea and faintness during minor surgical operations, in the case of opium poisoning, in the headache of an anemic patient, asthma, shock after accident, etc.

One drop of a one per cent. solution is the dose to commence with. This may be increased according to the effect produced.—*Therap. Gazette*, July, 1885.

Rhus Toxicodendron in Enuresis.—Dr. Geo. W. Willeford says that in the treatment of enuresis he has had excellent results from the use of rhus aromatica. In seventy-five per cent. cure has been effected and benefit has followed in the rest—*Med. Record*, July 25, 1885.

Anti-Emetic Mixture.—The following is a formula in common use at the Charity Hospital, New Orleans:

℞ Sodii bicarb., - - - - - - ℥j.
Aq. lauro-cerasi, - - - - - - ℥j.
Aq. menth. pip., - - - - - - ℥v. M.
Sig. Tablespoonful at a dose.

Anti-Rheumatic Mixture.—The following is also a common formula at the Charity Hospital:

℞ Potass. iodidi, - - - - - - ℥ij.
Vin. colchici sem., - - - - -
Syr. simplicis, aa, - - - - - ℥ss.
Aq. menth pip., - - - - - - ℥v. M.
Sig. Tablespoonful as a dose.

—*N. O. Med. & Sur. Journal*, August, 1885.

Osmic Acid for Neuralgia.—DR. GEO. W. JACOBY reports eighteen cases of various peripheral neuralgias, which he has treated with hypodermic injections of osmic acid. Of these eight were cured. Five of these were cases of sciatica, two were improved and eight were unaffected. Comparing his own results with those of other practitioners, he concludes that the sciatic nerve is the one that is most impressionable to the action of this remedy, and the old, inveterate cases present a greater chance of cure by it than do fresh ones.

He regards the following conclusions as justifiable:

1. We have in osmic acid a remedy which is of service in the treatment of certain cases of peripheral neuralgia, and in some cases where every other remedy has failed.

2. Osmic acid is not an anti-neuralgic, its action is very localized, and it frequently fails where other remedies succeed.

3. Its employment is in most cases very painful and not altogether free from danger.

4. It is dangerous to implicate a motor nerve in the injection.—*N. Y. Med. Jour.*, Aug. 1, 1885.

Lactate of Quinine Hypodermically.—M. VIGIER says that the lactate of quinine is the most soluble and the richest in the alkaloid of all the salts of quinine.

It is most specially valuable for hypodermic use. The following formula is recommended:

℞ Quiniæ lactatis, - - - - - grs. xv.
Aquæ destillat., - - - - - ʒj.

Dissolve with gentle heat and filter. The solution should be neutral.

There is no fear of causing pain, inflammation or abscess. It is the only injection that is perfect both as to efficacy and harmlessness.—*Gaz. hebd., 10 juin. Lyon med., 12 Juil.*

COLLECTIVE INVESTIGATION.—Inquiries are in progress now under the auspices of the Committee on Collective Investigation of Disease, of the *British Medical Journal* on the subjects of Chorea, Acute Rheumatism, Diphtheria, Old Age, Cancer of the Breast, also Paroxysmal Albuminuria, Albuminuria in the Apparently Healthy, Sleep-walking and Acute Gout.

OBSTETRICS AND GYNECOLOGY.

A New Oxytocic.—W. B. Arbery recommends hot mush poultices to be applied over the fundus uteri in cases of inertia, and of teasing, irregular, short, ineffective pains. He has not had opportunity to test their virtue extensively, but believes the results which he has seen warrant the recommendation for further trial. The applications must be made as hot as they can be borne.—*Med. Record*, July 25, 1885.

Conception Without Reappearance of Menstruation.—George A. Rae mentions a case in which a woman was married at nineteen years of age, menstruated two weeks later, and from that time "has never seen her changes but has always been able to draw off a half pint of milk from her breasts." She has borne ten children at full term, one at the eighth month, one at the sixth month and three at the fourth or fifth month of pregnancy.—*Brit. Med. Journal*, July 7, 1885.

Pelvic Cellulitis in a Child Three Years Old.—Dr. Douglas reports a case of pelvic cellulitis occuring in a little Italian girl, aged two years and nine months when he first saw her. The only symptom then manifest was retention of urine which twice necessitated catheterization. Three months later she was sick for several days with fever, constipation and dysuria. Six months afterwards she was brought to the doctor's office again. She was much emaciated and feverish, and suffered much in evacuating the bowels. In examination per rectum a firm elastic swelling encroaching upon the rectum from the right side was found, and a slight sense of fluctuation was elicited. Two days later there was a discharge per anum of pus and blood, and an opening was found in the rectum about an inch above the verge of the anus through which pus was discharging.

The child made a rapid recovery.

Inasmuch as prominent authors have stated that this is always secondary to inflammation of the ovaries, or uterus or tubes, this case occurring in so young a child is of special interest.—*Med. & Surg. Reporter.*

Porro-Mueller Operation.—Dr. Angus Macdonald reports a case in which he performed the Porro-Müller operation on a patient in

whom labor was obstructed by a large dermoid tumor which was adherent to the posterior aspect of the brim of the pelvis. The tumor was first recognized in the early part of 1881, when the patient was under the care of Dr. Spence for menorrhagia. In December of that year abortion took place at three months. The tumor was then considerably larger than in 1881. In 1884 the patient again became pregnant. No unusual symptoms occurred except that during the eighth month, when Dr. Spence saw her, the fundus was higher than usual and the abdomen more distended than usual.

Labor pains commenced February 28, 1885, continued with long intervals through the next day, and at 8 P. M., became severe, and continued so for some five hours, when they became feeble and ineffective. Dr. Spence found the pelvis obstructed posteriorly by a large rounded mass which was now fixed and could not be pushed up, as had been done at the time of the abortion.

Dr. Macdonald was summoned by telegraph. On arrival he found the patient rather exhausted. The fetus lay in front of the tumor, the head presenting but resting high up over the symphysis pubis in front and upon a solid mass posteriorly. The fetal heart was audible, but slow and feeble. The whole of the inlet of the pelvis posteriorly was filled up by a hard, firm, immovable mass, apparently a fibroid of the lower segment of the uterus. The available conjugate diameter was less than two inches. No form of craniotomy was possible, and it was determined to perform the Cesarean section, as otherwise the mother and child must both be lost, and the Porro-Müller operation was decided upon.

Antiseptic precautions were adopted except the spray. There were two serious complications: First, the right ovary was adherent low down to the surface of the tumor, and was flattened over the surface so that it had to be ligatured separately and removed, which was difficult on account of the nature of the attachment. Second, the stump was extensively attached posteriorly to the tumor, and this made it difficult to clamp it. The operation occupied an hour and twenty minutes on account of these difficulties. The patient lived twelve hours after the operation. The child was a well-formed, full term, female child, and cried lustily immediately upon being removed from the womb.

The tumor proved to be a dermoid ovarian tumor.—*Edinburgh Med. Jour.*, Aug., 1885.

Placenta Previa and Twins.—DR. JAS. T. PRIESTLEY records a case of placenta previa in which there was profuse hemorrhage. Being unable to detach the margin of the placenta, he forced his hand through it and delivered by the feet. The hemorrhage continued, and on passing his hand into the uterus he caught the feet of a second fetus. He was then obliged to introduce his hand the third time and pull off the placenta. The woman had already borne eleven children and was weak and anemic from the hemorrhages which had recurred several times during the month preceding confinement. The concurrence of placenta previa with adherent placenta in a twin pregnancy is certainly unusual. The mother made a good recovery, the second child lived, but the first one did not.—*Iowa State Med. Rep.*, July, 1885.

Cancerous Cachexia.—DR. GOODELL says it is a great mistake to suppose that the cancerous cachexia is present in every instance of cancer of the uterus. He thinks that it is absent in one-half the cases which come to him for treatment. Instead of being lean, bony and scrawny, with a leaden hue of the countenance, many of these cases present a buxom appearance with rosy cheeks. These cases, according to his observation, are less amenable to treatment and are less benefited by operative influence than are those in which cachexia is apparent early.—*Med. Bulletin*, Aug., 1885.

Hemorrhage Following Operation for Vesico-Vaginal Fistula.—DR. C. H. GHENT reports a case in which, after operation for vesico-vaginal fistula, there was persistent and alarming hemorrhage from the bladder. After trying a variety of measures to arrest the hemorrhage, injections of hot and cold water, of tannin solutions and alum solutions, gallic acid and ergot internally, and the latter by hypodermic injections, all without any apparent control of the hemorrhage, it was decided as a dernier ressort to inject a solution of persulphate of iron. Before doing this, however, Dr. G. decided to inject vinegar diluted with an equal quantity of ice water. The result was most satisfactory, an immediate and permanent arrest of the hemorrhage.—*Daniel's Texas Med. Jour.*, Aug. 1885.

SOCIETY PROCEEDINGS.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, July 14, 1885, Dr. Gregory in the Chair.

Office of Fetal Membranes in Labor.

Dr. G. A. Moses read a paper on "The Office and Management of the Membranes in Natural Labor." Vid. p. 206.

Dr. Lemoine thought there were very few cases indeed in which the membranes render any service in dilating the vagina and vulva. In the vast majority of cases the membranes spontaneously rupture soon or immediately after the dilatation of the os uteri.

Dr. Boisliniere said he presumed that Dr. Moses did not presume to lay down an absolute rule in his paper. In his observation, too, the membranes ruptured spontaneously in the great majority of cases. In vertex presentations the membranes have very little to do with the dilatation of the vagina and vulva. Madame La Chapelle called attention to the "flat sac" formed by the membranes in vertex cases. In some cases the membrane is in such close apposition with the head, that it is not by any means always easy to be certain whether the membranes have ruptured or not. In order to determine this Tarnier directs to push the finger up along the side of the head when, if the membranes have been ruptured, there will be a little gush of water as the head is pressed aside. In vertex cases the head does all the dilatation of the parturient canal.

In other than vertex presentations there may be a good deal of water in advance of the child, and the membranes may be distended and protruded like a sausage. In such cases it is by all means to be respected. In vertex cases it has served its purpose when the os is dilated and may be ruptured without harm, sometimes with advantage. If the head is high up the sac should be ruptured by

the side of the head, for if it be ruptured in the centre the cord might be washed out in the gush of waters. Where the os is fully dilated, little water presents and there is delay in the advance of the labor, he would advise rupture of the membranes. If this is not done there may be premature detachment of the placenta, hemorrhage and death of the fetus. Dr. Prewitt had told him of a case which he reached just in time to rupture the ovum, which had been expelled entire. The child was making convulsive movements and would speedily have perished. In pelvic or face presentations the membranes should be respected, as the sac does more to dilate the parturient canal in these presentations; and, furthermore, the most favorable moment for obstetric operation and manual or instrumental interference, either to correct position or to expedite delivery, is at the time when the membranes first rupture.

Dr. Nelson related a case in which the membranes had protruded from the vulva to such an extent as to suggest the inquiry whether there had been a rupture of the vagina, and extrusion of a coil of intestine.

Dr. Boisliniere said this must have been a somewhat oblique presentation. In some cases there was a sort of double bag of waters, and the water would escape from the outer one some time before the inner sac with the larger amount of waters was ruptured. He thought that in occipito-posterior positions the membranes were apt to be prematurely ruptured.

Dr. Moses said that he had kept no record as to this point, and therefore could not state a definite proportion of cases in which the membranes came down through the vulva, but certainly the circumstance was rare. The view which he had advanced in his paper was by no means a new one. It was in all essential particulars the same as that held and taught by Ramsbotham. The danger which had been referred to, that the fetus might be retained in the amniotic sac, was a very remote one. It was an exceedingly rare occurrence. In only one instance had it occurred in his practice, and then he arrived just as the entire ovum was expelled, and in time to rupture the membranes and take the living child.

As a rule, the membranes ruptured even before complete dilatation of the os uteri. He thought it possible that instead of allowing or urging patients to be up and about the room or sitting in a chair during the first stage of labor, it would be better practice to have the woman go to bed as soon as the pains become severe, and

in this way preserve the sac longer than otherwise might be. In his paper he only intended to refer to cases of ordinary vertex presentation.

He thought that the birth of a child with a caul, which is simply a complete circumferential rupture of the membrane, was due generally to the mother's sitting or standing too long.

NORTHERN KANSAS MEDICAL SOCIETY.

The second regular meeting of this society convened in the court house in Hiawatha, and was called to order at 4 P. M., by President Edwards.

The following members were present:

Drs. A. G. Edwards, N. Hayes, S. Murdock, E. W. Bliss, W. W. Nye, W. A. Haynes, J. F. Lesh and E. W. Bullard.

There were also present, Drs. E. T. Myers, C. J. Logie and E. J. Leigh.

Reports of officers and committees were heard and disposed of.

Dr. Nye, for the committee on election, presented the name of E. T. Meyer, M. D., for membership, who was unanimously elected by acclamation.

The order of business was transposed to permit Dr. Murdock to introduce two cases. Dr. Bliss operated in the presence of the society upon the first of these patients for pterygium of both eyes, removing the adventitious growths, using the forceps, knife and scissors without an anesthetic. Dr. Murdock gave a history of the treatment this case received from an oculist in Galesburg, Ill., extending over a period of six months, without any alleviation.

The other patient had some obscure and painful affection of the right eye of four years' standing. The organ being perfectly normal in appearance at the time, no formal attention was accorded it by the Society. It was doubtless a case of supra-orbital neuralgia, involving the ciliary nerves of the ophthalmic branch of the fifth nerve.

Dr. Bliss, of the Committee on Elections, proposed for membership Dr. C. J. Logie and E. J. Leigh, who were unanimously elected by acclamation.

W. W. Nye, M. D., then read a report of a successful case of ovariotomy, and exhibited an interesting specimen.

The report was characterized by unusual clearness and simplicity, and was listened to with marked attention and interest.

On motion of Dr. Logie the paper was referred to the Committee on Publication (vid. next issue of COURIER).

Dr. Murdock read a paper on "Emmet's Operation," and ably reviewed many of the therapeutic tenets of that classic teacher. The more prominent symptoms and related disorders, indicating a resort to the operation, were briefly touched upon, in the short time remaining. The essay was held for completion.

Dr. Logie opened the discussion on Infantile Diarrhea, with special reference to bad hygiene as a concomitant to severe cases. The Society hurriedly discussed malarial and other complications, with appropriate treatment for each.

The Executive Committee reported as essayists for the next meeting, Drs. Clutter, Bests, Bliss and Hayes. Subject for general consideration—Typhoid Fever.

President Edwards extended the thanks of the Society for the papers read.

Society adjourned to meet at Seneca in November, at 3:30 P. M.

M. HAYES, Sec'y.

THE THIRD ANNUAL MEETING OF THE AMERICAN RHINOLOGICAL ASSOCIATION will be held at Lexington, Ky., October 6th, 1885. Papers and discussion will be devoted exclusively to the Diseases of the Nasal Passages and their sequences.

The present officers of the Association are:

President, P. W. Logan, M. D., Knoxville, Tenn.; *1st. Vice-President*, A. DeVilbiss, M. D., Toledo, Ohio; *2nd Vice-President* J. A. Stucky, M. D., Lexington, Ky.; *Recording Secretary*, C. A. Sims, M. D., St. Joseph, Mo.; *Librarian*, N. R. Gordon, M. D., Springfield, Ill.

COUNCIL.

J. G. Carpenter, M. D., Stanford, Ky.; H. Jerard, M. D., East Lynne, Mo.; H. Christopher, M. D., St. Joseph, Mo.; E. F. Henderson, M. D., Los Angeles, Cal.

Information concerning the full Programme, Membership, Papers, Attendance, etc., may be learned from any of the above officers of the Association.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

BRITISH MEDICAL ASSOCIATION.—CAERPHILLY CASTLE.—PLAN OF THE CENTRAL NERVOUS SYSTEM.—CERTIFICATES OF INSANITY.—HYSTERICAL WOMEN.—BIGOTRY AND INTOLERANCE.—UNIVERSITY COLLEGE HOSPITAL.—INTERNATIONAL MEDICAL CONGRESS.

LONDON, August, 1885.

The British Medical Association Meeting at Cardiff has been a very successful one, and quite equal to most of its predecessors. It would be almost impossible to do justice to the many able and instructive papers which were read before the several sections in a letter of this description, which is necessarily limited by the space at the disposal of your editors. In my last letter I mentioned some of the chief subjects that would be brought under consideration, and a report of the papers will appear in full in the *British Medical Journal*; but two to which I would call particular attention are the addresses delivered at the opening of the Sections of Obstetric Medicine, and of Pharmacology and Therapeutics. In the first named Section, Dr. Gervis, the lecturer on Midwifery and Diseases of Women at St. Thomas' Hospital, London, brought under the notice of his hearers the subjects of the death rates from childbirth and cancer, and the value of antiseptics in midwifery; and in the Section of Pharmacology and Therapeutics, Dr. Thomas Fraser, of Edinburgh, gave a general review of the whole subject, referring principally to the progress made in recent years, and pointed out the best methods of study most likely to advance pharmacology, and the best means for encouraging and promoting this study. Several important questions bearing on the Constitution of the Association were discussed and disposed of. Perhaps the most

important was the adoption of a recommendation of the Council that the Association should expend £20,000 in acquiring a site and erecting a building in London for its business purposes. The building will contain the central offices of the Association, accommodation for printing the *Journal*, and rooms for holding meetings.

The most successful excursion was one to Caerphilly Castle, at the invitation of the Marquis of Bute. The castle is a grand old ruin, perhaps the most extensive in the United Kingdom, covering as it does nearly 30 acres. Its early history is shrouded in oblivion, but it is supposed to have been erected by Gilbert De Clare, about 1270; in 1314 De Clare, Lord of Caerphilly, having fallen at the battle of Bannockburn, the castle became the property of his sister Eleanor, wife of Hugh Despencer, one of the favorites of Edward II. Despencer greatly strengthened and enlarged the castle about 1320. Seven years later Despencer gave up the castle to King Edward III., and it remained crown property until the reign of Edward VI. The castle and manor were then purchased by Sir William Herbert, afterwards Earl of Pembroke, and Lord Herbert, of Cardiff. From the Herberts the manor passed into the hands of the Lewises of Vau. Thence it descended to the Windsors, and from them by marriage in 1766 to the family of the present owner, the Marquis of Bute.

The ruins of the castle are an immense pile of solid and rugged old walls and towers, in many places almost covered with ferns. One particular tower stands greatly out of the perpendicular and is one of the chief attractions of the castle. The walls are fully eleven feet in thickness and about eighty feet in height. It is supposed to have been forced into its present position by some explosion, possibly the springing of a mine during a siege. In the great hall on the south side of the quadrangle the Marquis of Bute had provided a luncheon for the members of the Association, and about 250 members and their friends partook of his hospitality. The hall is in a state of tolerable preservation, having been roofed over with wood a few years ago by the present Marquis. It is seventy feet in length, thirty feet in width and seventeen feet high. It is lighted with four lofty windows of beautiful design; between the two centre windows are the remains of a high fire-place of which the mantle is richly carved. The President of the Association and the Mayor of Cardiff were among those who took part in this excursion.

A recent contribution to our knowledge of the anatomy and physiology of the nervous system has been made by Dr. Hill, the Demonstrator of Anatomy at the University of Cambridge. Dr. Hill, I know, has been working at this subject for years, and the results of his numerous observations and prolonged study have been given to the profession in the form of a dissertation for the degree of M. D., under the title "The Plan of the Central Nervous System."

In the early part of the year Dr. Hill lectured before the Royal College of Surgeons of England in his capacity of Hunterian Professor to the College, on the same subject. In his thesis he points out that the anatomical elements of the central nervous system are of only two kinds, viz., nerve cells and nerve fibres. Nerve cells vary extremely in form and size. The gray matter of the brain is the centre of activity, the white the road for conduction. The gray matter is conspicuous for its abundance of cells, the white by their absence and the presence only of nerve fibres. To the cells have been attributed the functions of automatism and reflex action. It is doubtful whether either exists as an absolute property of a cell. Reflection is carried out no doubt through the medium of the cells, but they have no selective property, they have no influence in directing the course of reflection, but the nervous impulse (as an electrical one) rushes along the lines of least resistance. And when a sensory, afferent, or exciting impulse reaches a cell, and there is less resistance to its passage along a return fibre from the same cell than to its passage upwards to the higher centres, reflection is said to take place. And when an habitual transference of nerve impulse takes place from an afferent to an efferent nerve, the name of centre has been given, but given in error, as it was supposed that instead of simply a transference of impulse from one nerve fibre to another, in reality an impulse was there generated "de novo" which was called the automatic function of the cord or brain. But as Dr. Hill says, "Of the existence of automatism as an attribute of any particular group of cells, we have no physiological evidence; one after another its strongholds have been invaded, and its imperial function replaced by the subordinate one of reflection." When the sole of the foot is tickled the disturbed molecular impulse is passed up the nerve to the lumbar enlargement of the cord and reflected at once down an efferent nerve, and the foot is withdrawn from the source of irritation. No knowledge of the affair need be appreciated by the higher centres, and indeed

the movement takes place during conditions of complete insensibility, or when it is impossible for impulses to be conducted up the cord, as for instance when acute myelitis above the lumbar enlargement has completely severed the connection between the higher brain centres and the lower extremities. And again, when the bladder contains urine it transmits the intelligence along different nerves to the lumbar enlargement of the cord where the impulse would immediately be reflected to the nerves which produce the expulsive power of the bladder were they not controlled and inhibited by the higher centre; in fact the reflex channel is blocked so that the knowledge of the presence of urine in the bladder is recognized by the higher centres, and *their* reflex impulse is calculated to produce a restraining power on the expulsive properties of the bladder, and the water is not expelled until we are pleased to block the line to the higher centres and allow the reflex action of what has been called the micturition centre to come into play by rendering that line for the transmission of the nerve impulse more open than the other, and therefore offering less resistance, the bladder is then emptied. But if the line to the brain is completely blocked by acute myelitis, the reflex action passes along its most natural course unrestrained, and the bladder is continually emptying itself, and we have incontinence of urine. By continual usage of a certain track, we can break down the obstacle of resistance so effectually that impulses can pass along it with such perfect ease that the actions produced become to be considered as automatic. On this fact greatly depends the skill and dexterity acquired in certain handicrafts. The same series of stimuli bring into action the same series of motions, so that almost all resistance to the passage of the impulse along certain lines is removed by constant usage, and the action becomes almost automatic. For instance in the acquirement of facility for playing the piano; at first the notes are taken in by the eyes and a series of nervous processes are necessary to transmit the impulses along the necessary tracks to produce the proper movements of the fingers. The brain has to recognize what the note is, what key of the piano represents that note on the key board, and then has to tell which finger to touch it and how to touch it, whether softly or with force. After a time and with practice, the pianist becomes such an adept that all these processes—the taking in of the value of the notes, their estimation, the transference of the impulse to efferent nerves, and the proper

striking of the keys become in appearance almost automatic, and are carried on without the intervention of the higher centres, the performer possibly all the time being engaged in conversation or otherwise using his intellectual faculties. Many men who know well their business can laugh and joke while proceeding with their work, and are what are called skilled workmen. Probably one of the functions of nerve cells throughout the system is to a very large extent that of increasing the number of fibres towards the periphery axis-cylinders are but out-growths of cells. They may, therefore, be regarded as permanently, and throughout their whole length, cell processes. Hence their dependence for nutrition on the cell. Nerve fibres differ in respect of size, and in possessing or not a medullary sheath. The medullary sheath is formed of mesoblastic cells, and composed almost entirely of phosphatic fat, and in fact insulates the axis cylinder. Dr. Hill says:—"If the disturbance of nerve force resembles an electric current the medullary sheath would prevent the dissipation of its energy into surrounding conductors, and protect it from the inductive action of neighboring currents. The analogy in structure between a medullated nerve and an insulated electric conductor is so obvious as to tempt one to suppose that the presence of a medullary sheath depends upon the need for insulation only."

Seeing that the central nervous system is composed solely of nerve cells and nerve fibres and probably of simple combinations of these elements, the combination consisting of primary couples, and these couples connected with each other in many directions, the course that any nerve impulse may take depends upon whether it is reflected through a primary couple or split up and distributed through many couples, and this depends upon the resistance offered to its course. No specialized structures are set apart for the reflection of certain sets of impulses. And here Dr. Hill denounces the idea of the existence of nerve centres: "The nerve centre" he says "is the chimera of anatomists, a fabulous mixture of incongruous elements which is nowhere to be found. Our so-called centres are merely the meeting points of lines of conduction." The molecular impulse propagated along a nerve, usually called "nerve force," takes the road along which it is offered least resistance. The resistance offered between the posterior nerve roots and the cortex of the brain is generally less than the resistance offered between the neighboring sensory and motor tracts of the cord, and

therefore a sensory impulse is generally transmitted direct to the brain; but if the impulse is transmitted across the cord at once to the motor nerve of the same region, what is called a reflex act takes place. And "where the so-called spinal centres exist, the constant passage across of impulses has broken down the resistance; has widened as it were the conducting roads."

Another action has been brought in our courts of law by a Miss Neave against two medical men for illegally signing certificates of insanity by which she, being sane, was taken to and confined in a lunatic asylum. After hearing the details of the case and the evidence on both sides, the judge, having summed up, instructed the jury that the issues before them were: First, was the plaintiff on the days the certificates were signed a person of unsound mind and a fit and proper person to be taken care of; and, secondly, was the defendant guilty of culpable negligence in signing the certificate that she was then of unsound mind. After the action was commenced one of the medical men engaged in the case had died and therefore at the trial there was only one defendant. After a long consideration the jury brought in their verdict that on the day the defendant signed his certificate of the plaintiff's insanity she was not then of unsound mind. They found, secondly, that the defendant was not guilty of culpable negligence in certifying that the plaintiff was then insane. This amounted to a verdict for the defendant. The actions brought against medical men for signing certificates of insanity have been so numerous of late that it is difficult now to get doctors who will certify. No doubt in the case referred to the jury were quite right in their verdict, but it was a most difficult case for the doctors to decide. The lady in question was of a vile temper. She accused every one around her of being Jesuits. She was continually quarrelling with her mother and brother; she had pulled to pieces her mother's work before her eyes when she was in a rage with her; she had worried the servants, and in fact it appears that for years she had made her home a veritable hell upon earth. It is certainly excusable that her friends should have endeavored to relieve themselves of her presence in some way or other. And it was also excusable in the doctors to have considered that a lady who had acted as this lady had done was not in possession of all her senses. This opens up another and most difficult question. If it is right to restrain an habitual drunkard, as many assert that it is, by placing him in a home for dipsomaniacs against

his will, would it not be also justifiable to place hysterical women in solitary confinement against their will after the plan adopted by Weir Mitchell in your country, both in the interest of the patient herself and for the happiness and relief of her relations and friends. For as many homes are rendered wretched and almost unbearable by hysterical women as by habitual drunkards. It appears that a husband can confide his wife to the care of a medical man for what is called the "rest cure" in cases of hysteria. But there appears to be no means by which an hysterical single woman of mature age can be placed in a position most favorable for her recovery against her will. She can refuse to be cured, as many of them do, and can let her life remain, if not a burden to herself, a burden to all around her. There certainly ought to be some means by which hysterical women could be placed under proper restraint and control until they should have recovered.

The bitterness of sectarian strife has again broken forth and threatens to damage one of our most useful medical institutions. Perhaps the most bitter, rancorous, and aggressive religious body that this country has ever known is that which now represents those who are called political dissenters. The bigotry and narrow mindedness evinced by the Catholic Church in the middle ages was the outcome of the same feeling, which, perhaps, is inseparable from humanity, but which now actuates the opponents of the established church in England, and in fact those who oppose religion altogether. The most trivial circumstance becomes the excuse for trying to damage and annoy the church, and it does not matter what other interest suffer so long as an opportunity is afforded for the exhibition of intolerance. A proposal has been brought forward to exclude University College Hospital from participation in the Hospital Sunday Fund because the Hospital is nursed by a sisterhood belonging to the Church of England. No doubt the desirability of employing religious sisterhoods in hospitals is a subject open to many objections, but there are also some advantages. For twenty-five years the All Saints Sisters, as they are called, have carried out the nursing at University College Hospital to the satisfaction, it is said, of every one concerned. A stipulation was made when the sisters were first employed that they should in no way interfere with the individual religious views of the patients. Every patient was to be allowed to have the attendance and ministrations of any minister of religion or of any

scripture reader or other authorized representative of such minister that he or she might prefer. The sisters are said to have conformed most loyally to this agreement. But although the sisters have not interfered with the religious views of the patients they have nursed, a certain section of the dissenters want to oblige them to take into their body as nurses women holding different religious views from themselves. This the sisters refuse to do. So the irreconcilables have appealed to the Mansion House Committee to stop the annual grant from the Hospital Sunday Fund usually made to University College Hospital. As the Dean of Manchester has said in his letter to the *Times* on the subject: "It is proposed to punish the hospital and its patients with a cruel fine merely for employing a particular association of nurses, with whom no practical fault is found, solely on the ground that the association is formed of members of the Church of England; and to do this in the handling of a fund to which members of the Church of England are by for the largest contributors, and which is raised expressly on the condition that considerations of religious profession are not to affect its distribution; and, to do this, moreover, with no suggested alternative of doing the work which the sisters are now doing."

"It is suggested (no one has in terms proposed it, but some of the language used has no other practical meaning) that the sisterhood should be compelled to receive sisters who are not members of the Church of England. I merely wish to point out—as no one else has done so—that this is simply impossible. Women have consciences. And conscience, even in the case of church women who spend their lives for others, has its rights. They have as much right to combine on any religious basis they please, for the purpose of their holy work, as any other men or women. And as you bear witness,"—in a leading article the Times newspaper has had upon the subject,—"it is inevitable that they should belong to some definite religious community." They are not indeed bound to nurse University College Hospital. Still less is the hospital bound to employ them. But it must take them on their own terms or not at all. It is hard to see what the Hospital Fund Committee has to do with the terms on which the hospital authorities choose to do their work, so long as that work is confessdly well done."

One subject more. The International Medical Congress. It would be difficult to express the disappointment and surprise with

which the profession in this country views the dissensions which have arisen over the arrangements for the meeting of 1887. The choice of Washington as the place of meeting was a subject of universal congratulation to us all, and many of us have been looking forward to a first and perhaps an only opportunity of visiting the country which next to our own we hold in the highest esteem. We cannot enter into the merits of the controversy, but we fervently hope that some means may be found by which the prospects of a successful meeting in America may not be blighted. E. V. A.

TO PURIFY DRINKING WATER.—Professors Austen and Wilber, after the most elaborate experiments, consider it established that by the addition of two grains of alum to the gallon, or half an ounce to the hundred gallons, water can be clarified by standing, and that neither taste nor physiological properties will be imparted to it by this treatment. By increasing the amount of alum the time required for separation and settling can be diminished and, vice versa, by diminishing the amount of alum added a greater time will be required for the clarification. The solution of alum is made as follows: Dissolve half an ounce of alum in a cup of boiling water, and when it is all dissolved pour into a quart measure and fill to a quart with cold water. This solution should be kept in a bottle labelled "alum." Fifty-four drops of this solution contain two-thirds of a grain of alum, which is the amount to be added to one gallon of water. The old-fashioned teaspoon holds about forty drops, the new spoons, however, hold about seventy drops. Hence a modern teaspoon, scant full, will be about the right amount to add to every gallon of water to be filtered.

DR. BROWN-SÈQUARD has been awarded a prize of 20,000 francs by the five French Academies. It is the custom to award such a prize every two years successively to a scientist, a man of letters, a philosopher, an artist and an archeologist. Every second year one of the five Academies selects a candidate, and, with the consent of the other bodies forming the Institute, award him the prize. This year it was the turn of the Académie des Sciences to choose the candidate, and M. Brown-Sequard was selected.

TRANSLATION.

GILLES DE LA TOURETTE'S DISEASE.

By PAUL LE GENDRE.

It is not given to every one to go to Corinth * * * and still less to give a name to a new disease. We do not know if our colleague, de la Tourette, has had the first good fortune, but he surely merits the second, by the care with which, thanks to historical criticism and wise clinical study, he has separated from the chaos of choreas a distinct morbid entity, and has secured for it a place by itself in nosology.

M. Charcot, the best of judges in such a matter, declared in a recent clinic that the nervous disease described by M. Gilles de la Tourette in the *Archives de Neurologie* has special characteristics, so marked as to make appropriate the attaching to it the name of our friend. It would come with ill grace to refuse to accept the advice of the master, whatever opinion one might have as to the inconveniences which arise from designating diseases by the name of him who first described them, or is credited with having done so—and we are of those who hold this opinion.

M. Gilles de la Tourette recalls that Bouteille, writing in 1818, a "Treatise on Chorea," called "pseudo-choreas or false choreas" different nervous affections * * * which do not present the characteristic symptoms of true chorea, and resemble that only in the involuntary agitation of different parts of the body and in grimacing convulsions of the face.

This group of false choreas is a sort of *caput mortuum* from which have already been taken many morbid conditions of dissimilar nature. We may refer to it the peculiar disease of which M. Gilles de la Tourette has just given the first description.

The elements of this description are found in nine observations personal or derived from la Salpêtriére; the first of these observa-

tions, published in 1825 by Itard, cited anew by Roth in 1850, and by Sandras in 1851, concerns a patient who lived till 1884; she has been seen by M. Charcot, who has so been enabled to control the retrospective diagnosis.

Besides, M. de la Tourette demonstrates that the cases reported by Trousseau as laryngeal or diaphragmatic choreas accompanied by "tics," and reproduced by Handfield Jones, have been ill interpreted. Finally, the descriptions given by Beard in 1880, of the Disease of the Jumpers of Maine; by O'Brien, in 1883, of the *Latah* of Malasia, and by Hammond, 1884, of the *Myriachit* observed by American officers in Siberia, evidently relate to the same disease, whose principal characteristics are a special motor incoordination and an impulse at first to imitate speech and gesture (*echolalie*), then to utter involuntarily obscene exclamations (*coprolalie*).

This disease generally begins at an early age, four to sixteen years; it affects both sexes, but much more frequently males.

While moral emotions, especially fear, have often been invoked as causes, the true and determining cause is that of all nervous diseases, heredity—if not heredity of the disease itself, at least that of a defect of the nervous system. This affection has been seen in all classes of society and in all latitudes.

The mode of commencement is generally always the same. A special motor incoordination is observed in the child at school or at home. This consists in crises of muscular twitchings which agitate one of the upper extremities, then the other and the face. One of the arms is jerked with convulsive movements; the fingers extend and flex alternately; the shoulders are shrugged up. The eyes wink incessantly; one or the other of the buccal commissures is violently drawn up and down; the masseters in contracting produce a grinding of the teeth; the tongue is protruded and then drawn back into the mouth, but sometimes not soon enough to escape being bitten. The head is bent alternately forward, backward or laterally.

Incoordination then appears in the lower limbs, and as, instead of being limited to isolated groups of muscles, the contractions affect all the muscles of one or the other limb, often both at the same time, we see the patient stamp with the foot, squat down and rise up—very often jump up and down or jump forward. In many cases these different movements are executed simultaneously, and

are grouped together to form a special complexus, although varied, the predominance of the contractions in a group of muscles giving to the physiognomy of each patient an objective character quite peculiar.

The constant characteristic of the grimaces and contortions is their suddenness and their rapidity. All at once, when nothing in the appearance of the patient causes suspicion of anything peculiar, the spasmodic movements occur one or more times, and then everything is in order again. The contractions limited to the face and upper extremities take place very frequently at intervals of only a few minutes; the greater movements, as jumping, sometimes take place every quarter of an hour, every hour or less, according to the case.

These crises of incoordination may be provoked or aggravated in frequency or intensity by moral or physical emotion, the acts of persons near by, or by unexpected sounds. They are completely suppressed in sleep, which is so much the more profound, as the fatigue caused by the gesticulations during the day is greater. They diminish in frequency and intensity in the course of intercurrent febrile diseases. The motor incoordination is subject to exacerbations and remissions, more or less complete; it may in some cases constitute the whole disease; it is always the first phase of it which may continue for sixteen years.

During this time the physical condition of the patient is as satisfactory as possible. The functions of nutrition continue to discharge their offices well; for restorative sleep compensates always the muscular expenditure of the day, the gradual invasion of spasmodic symptoms establishes a sort of tolerance, and, inasmuch as the contortions are always as transient as they are severe, alimentation is never seriously disturbed. The general and special senses remain normal.

The mental state remains perfect; these patients are often very intelligent, have perfect consciousness of their state and make great efforts to master it. The moral state undergoes no injurious influence, except perhaps some habits of laziness which may interfere with their studies.

The second stage of the disease, which can be sometimes indefinitely postponed, manifests, after an excessively variable time, the curious phenomena of écholalie which follows a constant and altogether special gradation.

Most often it is on the occasion of an attack of disordered movements, at the time when the incoordination is at its highest, at the acme of the convulsion, that the patient utters forcibly an inarticulate cry (hem, ouh, ouah, ah), which is repeated several times in succession, at variable intervals. Then, the emission of the sound remaining always sharp and in perfect coincidence with the height of the convulsion, the cry becomes articulated, and the word pronounced takes in certain instances the character of an echo. If the patient hears himself called, in a loud voice, he repeats with force and rapidity his own name, and accompanies it with one of his gestures; or, he repeats the last words of some phrase pronounced somewhere near him while making his ordinary convulsive gesture.

It is not necessary for the production of ècholalie that an external sound shall strike the ear of the patient: simply the sight of a word which he reads may determine him to repeat the word in a loud voice; the thought alone of the word or rather of the thing which it represents may produce the same effect.

The patient may repeat perfectly words pronounced in an unknown tongue.

Besides the *écholalie* there exists in certain patients an impulse to imitate gesture and acts. There are some very curious observations on this point. One woman, aged and perfectly respectable, in the midst of a conversation with O'Brien saw an assistant take off his coat. She immediately commenced to disrobe, and would have stripped herself if she had been allowed to do so. A pilot, whose history Hammond relates, seemed forced against his will to imitate immediately the noises and the acts of the passengers. "These, for malice, delighted to make the grunting of a hog or other strange cries; others clapped their hands, leaped, threw their hats upon the deck, and the poor pilot would imitate all the gestures precisely as often as they repeated them.

This irresistible tendency to imitation (ècholalie of gesture or of act, as M. Gilles de la Tourette says) may lead the patient to objectionable acts.

The cook of a steamer, says O'Brien, was one of these patients. He was one day carrying his child in his arms upon the deck of the ship when a sailor approached carrying in the same way a billet of wood. Then the sailor threw his billet upon an awning and amused himself with making it roll upon the canvas, which the

cook immediately did with his child. The sailor loosening then the canvas let his billet fall upon the deck; the cook did the same with his little boy, who was killed by the fall.

The third characteristic symptom of the disease of M. Gilles de la Tourette is so frequent and so persistent that he considers it pathognomonic. That is *coprolalie.*

"Very often, besides the inarticulate cries which the patients utter, besides the écholalie to which they are subject, may supervene the utterance in a loud voice of some foul word, an obscene expression, always on the occasion of a convulsion, and in persons whom education and mental condition would seem to place beyond the reach of such inconsistences." Trousseau had already noted that the patient put forth in vain every effort to restrain the obscenity which he always has upon his lips. Neither the quality of the persons nor the gravity of the circumstances can effect anything (a young man in the presence of a respected mother, an officer at an official reception). He sometimes succeeds for an instant in restraining the filthy words ready to escape, but this contest is most often followed by a redoubled explosion of gross words.

In certain patients there exists a combination of *écholalie* with *coprolalie.*

This symptom, which appeared in the majority of the cases, makes its appearance at an epoch quite remote from the beginning of the affection and after the other two. One characteristic of the symptom which we are considering should not be lost sight of: it is that "the foul or obscene word is always uttered at the moment of the acme of the muscular action and that the gesture never emphasizes the signification of the word."

The course of the disease is slow and insidious: the commencement is obscure, the successive appearance of various symptoms at variable intervals; then, the disease once established, periods of exacerbation separated by periods of remission, sometimes so marked and so prolonged that one is tempted to believe in a cure.

Nevertheless the prognosis seems to indicate incurability. Life is moreover not shortened by the fact of the disease, which in the observation of the Marquis de D. lasted seventy-eight years, until death. Beard said with regard to the *jumpers*: "Once a jumper, always a jumper."

M. Gilles de la Tourette concludes his memoir with rules for differential diagnosis. Three cases are to be considered.

1. The individual is affected only with motor incoordination, with muscular twitchings. It is necessary to consider chorea, especially if the subject is young: but in that the motor incoordination is constant, and the muscular twitching have not the suddenness of those which we have described and are not separated like them by intervals of perfect calm. A great mental effort may for an instant suspend the convulsions of the jumper; it exaggerates, on the contrary, the gesticulations of choreic patients. Never in the disease with which we are concerned are there acute epiphenomena nor paralyses as in chorea; never an agitation so violent as to confine the patient to bed. The *tic non douloureux* may be taken into consideration when the patients still have only muscular twitchings limited to that region or have them only in a period of calm. But the evolution of the disease or recollection will bring them to light if there is jumping, extension of the convulsions to other groups of muscles.

M. Gilles de la Tourette admits that the non painful *tic* of the face may be in the evolution of the jumpery a first stage not yet passed by; for he has seen a young girl whose father had a non painful *tic* of the face and who herself presented the complete development of the disease.

2. When to the motor incoordination are joined the inarticulate cries, one can easily exclude the initial cry of the epileptic or hysterical attack, the epidemic barking which has hardly been observed since the middle ages, and which was accompanied by a group of mental disturbances and unaccustomed acts. In the so-called laryngeal or diaphragmatic chorea the sudden contractions of the phonating or respiratory muscles produce peculiar sounds, but sounds which do not coincide with the acme of a muscular convulsion.

3. When, finally, to the motor incoordination and the inarticulate cries are joined the utterance of articulate words with écholie, and coprolalie, the diagnosis is fixed. Certain aphasics pronounce well, while performing rational acts, some obscene or gross expressions; but they are the only words which have survived the wreck of their vocabulary, and no confusion can arise as to the point which concerns us unless these aphasics were at the same time affected with hemichorea or athetosis. The treatment which has appeared, not to cure, but to alleviate the symptoms most, and favors the establishment of periods of remission, embraces isolation with tonics, hydrotherapy and static electricity.

SELECTIONS.

CHEMICAL ANALYSIS OF DRINKING WATER AND OF ICE.

The following article appeared as an editorial in the *Detroit Lancet* for August, with the title "Impure Ice." It seems to us to contain an admirable statement of the present condition of chemical knowlege on the subject. In view of recent events with regard to well closing in St. Louis, the paper will be specially interesting to the profession of this city.

It has frequently been demonstrated that impure water when frozen furnishes ice which is dangerous to health when used for drinking purposes. In some localities pure ice is more readily obtained than in others. But in all places the guardians of individual or collective health should see to it that the ice used for drinking purposes is pure. Detroit of all cities in the world should have pure ice. Its river, sixty feet deep and half a mile broad, filled all the year round with spring water from the great lakes, would seem to make it impossible that it should ever have impure ice. And yet such is the ignorance and cursedness of human nature that more or less impure ice is frequently sold for drinking purposes. The health officer of Detroit, in his endeavors to put a stop to this traffic, has been to the pains to have the water from which the ice is cut which is supplied to the city examined by a competent chemist. His report, published in part in the *Detroit Free Press*, so well states one phase of the process of detecting impurities in ice, that we give it this prominent place. The examination and report is made by Dr. A. B. Lyons, of Detroit, widely known for his skill and erudition in all these matters.

He says that the chemist, in analyzing drinking water to determine its purity, admits at the outset that he does not know, as a chemist, what substances in the water give to it the power of caus-

ing disease. He is familiar with poisons, such as strychnine, aconitine, etc., of which a grain or one-tenth of a grain constitutes a poisonous dose. But he has no knowledge of any substance of which a ten-thousandth part of a grain will have deadly effect. Chemical analysis seeks for circumstantial evidence, such as that upon which the geologist bases his conclusions. The direct testimony leaves no doubt that the Detroit sewers discharge into the river an amount of filth to be reckoned only by hundreds of tons daily. It is a simple mathematical problem to calculate how extensively the river water is polluted with this sewer discharge, and, if the poisonous matter was a chemical compound, it would be easy to prove that, except near the mouth of a large sewer, dilution with living water, must practically render the poison innoccuous. But if the poison has the power of reproducing itself, mathematics are entirely at fault. All that a chemist can do in analyzing water is to show whether or not it contains evidences of pollution. If no chlorides are found in it, it cannot contain animal excrement in any quantity, and if it does contain chlorides it still remains to be shown that this is evidence of the presence of such excrement, and very often it is not.

In analyzing drinking water two objects are kept in view. First, whether it contains anything indicative of contamination by sewage. If it can be shown in any given case that chlorides come from any innocent source, they lose all significance. The presence of ammonia in river waters, particularly in the vicinity of towns, means nothing, as it is absorbed from the air, but in spring and well waters its presence indicates dangerous contamination. Nitrates as found in any drinking water are evidence that it is "unsanitary," but the salts themselves are harmless in the quantities in which they are found. Secondly, a chemist always looks for matter which in itself may be regarded as dangerous. The real danger is from certain micro-organisms, and the more fitted the water is to sustain them the more likely it is that they will be present. It is organic impurity, and especially the presence of nitrogenized organic matter, to which special importance is attached. The simplest mode of arriving at the quantity of such impurity is by observing how much ammonia is produced from it by the action of an alkaline solution of potassium permanganate. This tells the story of present dangerous contamination of any sample of drinking water. Almost equally valuable is the evidence derived from

the action of potassium permanganate in acid solution, indicating the presence of matter capable of taking up oxygen. Oxygen being inimical to the life of micro-organisms, water containing it tends to purify itself, this being one reason why there is so much difference between stagnant and running water.

Going beyond the domain of chemistry, the character of water can also be judged by the readiness with which it undergoes fermentation or putrefactive change. If sugar or some other substance prone to fermentative change is introduced, the presence of microzymes is manifested very speedily, and even if the water is allowed to stand a few hours at a summer temperature in a bottle partially filled, it will show the presence of impurities and something of their nature by the odor developed. Thus it appears that the conclusion of a chemist in regard to the wholesomeness of a water are inferential.

In the examination of ice the same conclusion will not result, as in freezing the water rejects some of its impurities, which, although they may be innocent in themselves, form the basis of certain conclusions. This is especially true of saline constituents, and it cannot be said that because a sample of ice is free from chlorides and nitrates the water from which it was cut was not contaminated with sewage. Experiments prove that it is probable that water in freezing rejects also some of the dangerous impurities. The only tests of those commonly relied upon in the examination of a drinking water, which, in an ice analysis, would give results of any value, are those for oxygen consumed and for albuminoid ammonia, but the exact interpretation that should be given to analytical figures has not yet been established by experimental researches.

In the limited time given for analysis, attention has been given solely to a few of the points by which we are accustomed to judge of the character of a water from an unknown source. No estimates have been made of total solid constituents or of nitrates, as such additional data in the present instance, where the question is one of sewage contamination, would add little or nothing to the information to be gained from the estimates actually made.

In each case is given (1) the quantity of free ammonia contained in the water; (2) quantity of albuminoid ammonia—i. e., of ammonia produced from organic matter contained in the water by the action on it of an alkaline solution of potassium permanganate; (3) the quantity of oxygen consumed in oxidizing the water at

140° F. by potassium permanganate in acid solution; (4) approximately the proportion of chlorine.

CHOLURIA.

The detection in the urine of biliary derivatives—except bile pigment, in the most general sense of the term—has always been imperfect and unsatisfactory. It is well known that Pettenkofer's test for the bile acids, by means of solution of cane sugar and sulphuric acid, so brilliant with the pure bile acids, or with inspissated bile diffused in water, is totally inoperative, even when bile is added to the urine. The determination of the clinical significance of such presence has, of course, been correspondingly unsatisfactory. Clinicians will, therefore, hail with pleasure any method which promises greater certainty than is now had in testing for these substances.

Such certainty seems to be promised by the recent researches of DR. GEORGE OLIVER, which appear in the third edition of his valuable little book, just published, on Bedside Urine-testing, and for which its present title is altogether too modest. In the first place, Dr. Oliver is disposed to consider that Pettenkofer's test does not react directly with the liver secreted salts, taurocholate and glycocholate of sodium, but only with the derived salt, the cholate. Hence, it does not indicate the presence of the biliary salts in fresh ox-bile until the latter had had time to decompose, and thus liberate the cholic acid; but it reacts at once and decisively after the bile has been boiled several hours with caustic potash, a procedure by which the bile salts are broken up and the derivative, cholate, furnished. This, according to Dr. Oliver, is the reason why Pettenkofer's test acts with inspissated, and not with fresh bile, for the extract is an evaporated product, and the taurocholates are decomposed by simple boiling. This, too, explains why it fails to afford a distinctive reaction with jaundiced urines, which are highly charged with bile salts.

Dr. Oliver's proposed test is founded upon the physiological fact that when the products of gastric digestion, peptone and parapeptone, which leave the stomach in an acid solution, meet with the bile, they are thrown down in the shape of a tenacious layer over the entire mucous membrane of the duodenum. In like manner a

solution of bile salts precipitates acidulated albuminous urine, or urine charged with peptone, and this precipitation of albuminous matter from an acid solution is also caused by the derivative of the bile salts, cholate of sodium, so that acidified albuminous urine becomes a test for bile salts, but an acidulated antiseptic solution of peptone is a readier and more delicate reagent. Such a solution Dr. Oliver makes by adding thirty grains of Savory and Moore's pulverized peptone, four grains of salicylic acid, and thirty minims of acetic acid to eight ounces of distilled water, and filtering to secure perfect transparency.

Now if twenty minims of perfectly clear urine, of normally acid reaction, reduced to a specific gravity of 1008 and containing bile salts in morbid quantity, are run upon sixty minims of the test solution, a sharply defined, white band of peptone appears at the border between the two fluids; and on oscillating the tube, so as to mix a little of the urine with the test solution, the upper part of the column presents an opacity, the density of which is proportionate to the amount of bile derivatives present, in marked contrast with the transparency of the urine below. On further agitation, the opalescence diminishes, and, perhaps, finally vanishes, but it is restored on adding more of the test-solution. The precipitate differs from all other urinary precipitates induced by an acidified reagent, in dissolving completely on adding a drop or two of acetic acid, or a citric acid test-paper, and diminishing, but not disappearing, on boiling, but the opacity is not affected by such a degree of warmth as is sufficient to dissolve urates. Further, an insufficiency, as well as an excess of acid, interferes with the reaction, as also does an excess of proteids or of the bile salts themselves. Hence the importance of securing the proper proportions, as in Dr. Oliver's formula, and of diluting the urine to be operated upon.

This test, according to Dr. Oliver, is so delicate that there can be readily determined by it, one part of bile salts in at least 18,000 to 20,000 parts of a solution of chloride of sodium. So far he has been unable to find any other constituent of urine which will react similarly; and, although it is true that a concentrated solution of chloride of sodium in the presence of an acid will precipitate a proteid, experiment shows that when the peptone solution is run upon a solution of salt of any specific gravity below 1050, no precipitation takes place. If the urine contains the average proportion of bile salts found in the majority of healthy urines, or less, the reaction is a mere tinge of milkiness, and is, also, not immediate.

In further proof that this reaction with urine points to bile salts as its source, we have the following facts: (1) That biliary salts extracted from the bile produce an identical reaction. (2) That all the secretions, except bile, either do not act on the proteids at all, as saliva, or they dissolve them, as the gastric and pancreatic juices; and that the bile salts are the only constituents of that secretion which possesses the property of throwing a proteid out of solution. (3) The test demonstrates that the proportion of bile salts present in normal urines varies in a well-defined degree with the activity of the digestive organs, showing that the agent reacting with the test is intimately connected with the digestive process. (4) Clinical experience.

As to further sources of error, mucin may be eliminated, because this substance in acid solution is not precipitated by the addition of more acid, and when it is thrown down in urine of acid reaction, it is highly probable that the acid added is not the reagent producing it, but merely supplies the requisite degree of acidity to enable the precipitant already present to operate, and in that event the mucin would only indicate the presence of bile salts.

Urates cannot become a source of error since the mode of application of the test, both qualitative and quantitative, requires the urine to be diluted to a specific gravity of 1008, by which solution of the urates is secured. In addition to the reason above given, the reduction in specific gravity to 1008 is done to obviate such fallacious results as are liable to occur in operating with urines of different densities—concentrated urines often simulating an excess, while urines of low specific gravity, though affording a reaction similar to normal urines, may actually contain more than the normal amount of bile salts.

As further conditions of success, the urine, if not perfectly clear, should be made so by filtration; if cloudy from blood, it should be first boiled and then filtered. If alkaline, it must be brought to a normal degree of acid reaction by acetic action.

Dr. Oliver has also made a peptone test-paper for bile-salts, and applies the test quantitatively, but for the details of this process we refer our readers to the book.—*Med. News*, Aug. 8, '85.

MALIGNANT GROWTHS invade the surrounding tissues and in general are to be distinguished by this peculiarity from tumors which displace the adjoining structures.—"Cancer," by W. Parker, p. 4.

NOTES AND ITEMS.

What Constitutes a Common Nuisance?—In Montreal some months ago a case was tried in which this question was involved The contractor for removing night-soil from vaults had neglected and refused to deodorize with lime or other material the night-soil, had spread it as manure upon open fields, where it had been allowed to remain exposed for days or weeks before ploughing under. He was successful in a first suit on some technical grounds. Emboldened by this success, he became more defiant. A second suit was instituted: "The defense argued that it is a necessity for night-soil to be removed from the city cess-pits and disposed of somewhere outside the city limits, that the fertilizing properties of night-soil are superior to those of other manures, that its use as a manure is a means of disposal more economical, and at the same time less hurtful to public health than any other—that night-soil spread on the surface of the land is neither more offensive nor more injurious to health than other kinds of manure—that the municipality of Verdun is a farming and grazing district, devoted chiefly to dairying and market-gardening, but that a few wealthy people have, so to speak, invaded it and built summer residences along the banks of the St.Lawrence; that these invaders are numerically few as compared with the agriculturists, who use night-soil as manure, and that, therefore, as only a few have been inconvenienced, while many have been profited, the deposit does not constitute a public or a common nuisance.

After a lengthy trial the defendant was found guilty and fined, the Court ordering him in future to render the deposit harmless and inoffensive. The Court repudiated the ingenious *numerical* plea of the defendant, and held with Sir. James Stephen that, "it is immaterial whether the act complained of is convenient to a larger number of the public than it inconveniences" as long as it obstructs or causes inconvenience or damage in the exercise of rights common to all, the right of pure and wholesome air being the inalienable

right of every one. With respect to the important question of danger to public health, it was held that anything may be said to be a nuisance to life or health, if it either actually causes danger thereto, or if in the absence of continued care and prudence (which cannot reasonably be expected to be constantly maintained) it is liable to cause danger."—*Medico-Legal Jour.*, March, 1885.

The Western Society of Psychical Research numbers already about one hundred members. Applications for membership may be addressed to J. E. Woodhead, Sec'y and Treas'r, 171 W. Washington Street, Chicago, Ill.

Medical and Sanitary Conditions in Sweden.—No druggist is allowed to dispense a prescription, or to sell any poisonous drug without the signature of a *Swedish* physician. Grocers are not allowed to sell arrowroot; it is considered a drug. No pharmacist may prescribe, nor may a physician dispense his own medicine. A prescription must be redated and signed by the physician before it can be filled.—*Brit. Med. Jour.*, Aug. 8.

Metallic Sulphates as Disinfectants.—According to the results reported by the committee of the American Public Health Association, none of the metallic sulphates can be relied upon for the destruction of spore-bearing pathogenic organisms, and the germicidal power of ferric and zinc sulphate is too feeble to make these salts available for disinfecting purposes, even in the absence of spores.—*Med. News*, Aug. 22, '85.

Dr. Robert Battey has averaged one ovariotomy a week since January 1, last. The largest tumor weighed when removed fifty-six pounds. Not one case has terminated fatally. The doctor attributes this success in a great measure to antiseptic precautions which he adopts. The editor of the *Atlanta Medical and Surgical Journal*, who has recently visited Dr. Battey, thinks that in a greater measure it is due to the careful and skillful nursing which the patients receive under the charge of Mrs. Battey.

Errata.—In our last issue in the closing sentence of Dr. Washburn's paper there are two unpardonable typographical errors. The first word of the fourth line from the end should be shams instead of "shame," and in the following line "stupidity" should be stability.—Ed.]

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ORIGINAL ARTICLES.

A MIXED-CELLED SARCOMA OF THE UTERUS REMOVED THROUGH THE VAGINA.—TREATED WITHOUT DRAINAGE.—RECOVERY COMPLETE IN NINETEEN DAYS.

BY DR. N. B. CARSON, ST. LOUIS.

[*Read before the St. Louis Medico-Chirurgical Society, Sept. 22, 1884.*]

THIS specimen I have brought here to-night, thinking it might be of some interest to most of you on account of its rarity. Although it is not as rare as the near relative, carcinoma of the body, still it is enough so to be of more than common interest. As the operation for its removal is still comparatively new, and just now the subject of animated discussion, I have thought a little history of the operation with a description of its technique might be a fitting subject for this, the opening night of our new quarters.

The operation for the removal of the diseased uterus was first suggested by Soranus in the first century, but was first performed by Andreas a Cruce in the year 1560. Like many other operations that are now popular, it was discarded on account of its great fatality, being performed only occasionally for prolapse,

until, as Fengar[1] says, "The introduction of antiseptic surgery gave us the right to carry out this operation into practical life." Sauter seems to have the credit for having first done the operation in this century, 1822. Hennig followed in 1876. Czerny, Mikulicz, Billroth and Schroeder followed, perfecting the operation until it stands as it does to day, one of the most brilliant as well as one of the most difficult surgical undertakings.

Mrs. E. E. G——, aged 53 years, American, married, housewife, entered the St. Louis Mullanphy Hospital, July 28, 1885, having been sent to me by Dr. L. Ch. Boisliniere, Sr., on account of cancer of the uterus, which she desired to have removed. She gave the following history:

Menstruated first at the age of fifteen years. The discharge was profuse, and accompanied by some pain, but up to the menopause had always been regular. Had had five children and no miscarriages. Labors perfectly normal. Had always enjoyed good health until nine years ago, when she had an attack of meningitis which left her broken in health and with a pain in the back which was almost constant. Had once suffered with leucorrhea, but this was of short duration and gave no trouble. About two years ago, first noticed a watery discharge which gradually became more and more profuse and then purulent, with at times more or less blood. For the past three months this discharge has been very offensive, and the flow of blood very free, so that at the time of her entrance into the hospital she was quite exsanguined and cachectic in appearance. Has suffered much latterly with nocturnal pains, for the relief of which she has had to use morphine freely. Has lost much flesh, especially during the last three months. The family history was good, except that her mother had a fatty tumor in her side, and her sister is supposed to have an ovarian tumor. Bi-manual examination through the vagina and rectum disclosed an enlarged uterus freely movable, with no signs of cancerous infiltration in the parametria.

Specular examination revealed a patulous os excoriated from the effects of an iron application recently made. Depth of uterus about four and a half inches. Carrying the finger through the patu-

1. *Am. Jour. Med. Sci.*, Jan'y, 1882.

lous os to the fundus, an irregular tumor about the size of a large hickory nut was felt on the left side. The rest of the surface of that side felt hard and irregular, while the right side felt smooth and healthy, and was so thought to be until the organ was removed.

This examination was made with great care, and with the patient under the influence of ether. The case seemed to be one of the very few cases suitable for the extirpation of the entire organ through the vagina, and, if the operation is ever justifiable, it seemed so here. The facts were then plainly laid before the husband of the patient, the immediate dangers of the operation fully explained and the chances of a complete removal of the disease, as well as the possibility of an almost immediate return. I also told him that I did not advise the operation, but if, after considering the matter carefully he and his wife, being fully apprised of the chances for and against it, were still desirous of taking those chances, I would undertake the operation. At my next visit, he said that he and his wife had carefully considered the matter, and that they had made up their minds to have the operation performed.

The patient was immediately put upon preparatory treatment, consisting of iron and tonics. A warm bath every second night with inunctions to secure a healthy action of the skin. Carbonate of lithia with bi-carbonate of potash were given to stimulate the action of the kidneys, which were rather sluggish. The vagina was thoroughly washed out twice a day with a solution of permanganate of potash and chlorinated soda, and after the uterus had been thoroughly wiped out and a mixture of Monsel's solution, carbolic acid and glycerine applied to control the bleeding, and a pencil of iodoform and cocoa butter introduced into the cavity, the vagina was plugged with cotton and iodoform. All being in readiness, Sunday, Aug. 9th, assisted by Drs. E. H. Gregory, G. A. Moses, L. L. McCabe, P. Y. Tupper, F. A. Glasgow, R. M. Funkhouser, Burnett and L. Boisliniere, Jr., with Drs. L. Boisliniere, Sr., Mayger, Clinton of Charleston, Mo., and Thatcher present, I removed the entire uterus through the vagina after the following method:

The patient was brought partially under the influence of the

anesthetic (Squibb's ether) before she was placed on the table. Being thoroughly anesthetized she was put in the lithotomy position in a good light, and the uterus drawn down by a divergent vulsellum introduced into the neck. The vaginal mucous membrane was divided with curved scissors around the entire circumference of the neck just at its uterine junction. With the closed scissors the loose connective tissue joining the uterus with the bladder and rectum was separated. At the sides where the vessels enter the organ, the attachments were so strong as to necessitate cutting, and for this the scissors and Paquelin's cautery were used, all bleeding vessels, several in number, being twisted and hemorrhage thus stopped. A male urethral sound was now introduced into the bladder to aid in the separation of the two viscera, and its point directed downward and outward, when its beak presented in the vagina. The opening, however, was small and could not be found when searched for later on in the operation.

A loop of strong silk was introduced through the lower part of the body of the organ, from behind forward, and the vulsellum withdrawn. The attachments, both anteriorly and posteriorly, were separated with the scissors until the whole organ was freed to the peritoneum. By means of the loop, the uterus was well drawn down into the vulva, and the neck amputated, in order that the bulk of the organ might be reduced and the subsequent eversion rendered more easy.

The parts were then well cleansed and the bleeding stopped, when the peritoneum was divided in front to the broad ligament on each side, keeping close to the body of the organ. The index finger of the left hand was hooked around the fundus into Douglas' cul de sac, and the cavity thus opened behind, and the attachments separated to the broad ligaments. A Martin's instrument for eversion in these cases was now introduced, and, assisted by strong vulsellum forceps, the fundus was thus brought forward and out at the vulva, when a strong loop of heavy silk was carried through the upper part of the body, in order that the organ might be the more easily controlled in the succeeding manipulations. The womb was so much enlarged as to almost fill the vagina, thus rendering the subsequent steps

of the operation very difficult and tedious. With an aneurism needle, threaded with a strong piece of silk, the left broad ligament was pierced in its centre and ligated in halves. Outside of this an iron wire was placed around the entire ligament and tightly twisted. With the scissors the left ligament was then divided, and, there being no bleeding, the entire uterus was delivered through the vulva, and the right broad ligament ligated in the same manner as the left, and divided close to the organ, and the whole thus removed.

A fine sponge was now introduced into the peritoneal cavity to protect the several loops of small intestine presenting at the opening from which the womb had been removed.

The broad ligaments were then drawn down and inspected and found free from disease. A threaded needle was passed through the angles of the vagina, and through the ligaments external to the ligatures, and the stumps thus brought into the vagina. The first sponge was now removed and replaced by another fine flat one thoroughly dusted with iodoform, the intestines and pelvic pouch first having been thoroughly cleansed.

Fine silk sutures were now passed into the free margins of the peritoneum and the sponge withdrawn, and between ten and fifteen grains of iodoform were dusted over the intestines and into the pelvic pouch. The edges of the peritoneum were then drawn together, the vagina well cleansed, and the ligatures around the ligaments brought out at the sides. The cavity of the vagina was well dusted with iodoform and filled with gauze saturated in a solution of bichloride of mercury, 1 part to 3,000, thoroughly dusted with iodoform. The patient was then put to bed and surrounded with hot bottles. The operation required two and three-quarter hours for its completion.

The uterus measured after removal five inches in diameter transversely through the fundus, four inches through the antero-posterior diameter, and six inches from the os to the fundus. Several times during the operation subcutaneous injections of brandy had to be administered to sustain the flagging pulse.

The shock attending the operation was very great, and reaction was not fully established until noon the next day, when the thermometer registered 101⅗° in the axilla, and the pulse 112. At

6 o'clock of the same evening the temperature had fallen to 99⅘° and the pulse to 72. At no time after this did the temperature reach 100°, nor did the pulse go beyond the same figure. The wound was dressed for the first time on the fourth day, when the dressings came away free from odor. The same kind of dressing was reapplied and allowed to remain four days, when, the discharge being free, it was removed, and as there was some little fetor, it was decided to substitute for it cotton dusted well with iodoform, the vagina having been well washed out with the solution of permanganate of potash and chlorinated soda. After this these dressings were applied daily. The bowels were moved on the ninth day, and the ligature from the right ligament came away on the tenth, and from the left on the sixteenth day.

The patient was out of bed on the thirteenth day and left the hospital, nineteen days after the operation, much improved in appearance and general condition; having given up almost entirely the use of morphine, to which she was necessarily addicted before the operation.

The difficulties which presented themselves to my mind during the progress of the operation were, first, the danger of opening the bladder. This, however, can be easily avoided by keeping close to the body of the uterus and tearing instead of cutting the connective tissue joining the two organs. Care, however, must be taken to include all of the diseased tissue, and when it is found to involve the bladder, all authorities agree that there should be no hesitation about its removal, and the subsequent closure of the opening thus made if possible. What is here said of the bladder applies also to the rectum when it is involved in the disease. I had no difficulty in that respect, as the disease in this case was confined entirely to the uterus, and only in one place approached the surface. This was anteriorly near the internal os. How I opened the bladder I do not yet know, as I tried to cut wide of the organ, using extraordinary care during the entire procedure. The opening was very small and I would never have known of its existence had it not been for the introduction of the sound.

The second danger to be avoided was the division of the ure-

ters. This is easily done by drawing the uterus down into the vulva, when the ureters are well out of the line of incision.

The third danger, that of hemorrhage, which, one would imagine from the number, size, and arrangement of the blood vessels supplying the organ, would in all cases be considerable, seems to be of little if any trouble. To avoid this danger Czerny always places an assistant on the left side of the patient during the operation to control the aorta until cut vessels can be tied.

Cushing[1] ligates the uterine artery first by means of a curved needle through the roof of the vagina before making any incisions.

The fourth difficulty is the eversion of the womb and the ligation of the broad ligaments or the vessels therein. To accomplish this end most operators retrovert, but Fengar[2] anteverts the organ, and it seems to me much the easier of the two methods. When the uterus is not much enlarged it can be easily done by bi-manual manipulation; but when it is as large as the specimen here it is different and requires much patience and hard work.

To avoid the danger of immediate and secondary hemorrhage much ingenuity has been displayed and many plans have been adopted by different operators. Some ligate each vessel as it is cut, which seems to me a very difficult method. Others, and the majority, ligate *en masse*. Still others advise the division of the ligaments with the galvano-cautery. (Anderson.[3]

Most generally the double silk ligature of Schroeder is employed, but many use the elastic ligature. The great objection, however, to this is the difficulty of keeping it in position, and to accomplish this Wallace[4] secures it with a long hair-lip pin, which he claims serves also as a drain.

In this case I first tied the ligaments in halves and outside of these placed an iron wire ligature.

I think the wire quite sufficient, for if a good wire is used it can be twisted very firmly so that it will be impossible for it to

1. *Am. Jour. Med. Sci.*, April, 1882.
2. *Am. Jour. Med. Sci.*, Jan'y, 1882.
3. *Am. Jour. Obst.*, April, 1882.
4. *British Med. Jour.*, Dec. 27, 1884.

slip, and thus control most effectually all bleeding, and it is not nearly so difficult of application as is the silk.

As to the proper treatment of the cavity left after the removal of the organ, there is much diversity of opinion. Schroeder advises the sewing together of the free peritoneal margins and the introduction of a T drainage tube, while Saenger [1] says, "It is better to use no drainage tube, for this may pull the edges of the wound and prevent them from lying in contact," but he advises the suturing the vaginal and peritoneal surfaces together. Martin, like Schroeder, always uses drainage, while Duncan [2] advises against drainage. So also does he advise against sutures, but recommends that iodoform be used freely, and that the patient be maintained in the upright position for the first ten days. Mikuliez uses constant irrigation, a very inconvenient and uncomfortable plan I should think.

Fengar [3] modifies this and advises that constant irrigation be used only when the bladder or intestine has been opened. Spencer Wells [4] says he would not close the peritoneum, but would apply forceps to the cut vessels and let them hang out of the vulva, as they would not only serve as drains but would also bring together the cut surfaces, especially if they were tied together.

We now come to the consideration of the all important question, and one that has been of late the subject of much controversy both on this and on the other side of the Atlantic. Is the extirpation of the cancerous uterus a justifiable operation? If so, what cases are suitable for the operation? It is now generally accepted, although there are still some good authorities which yet hold to the old theory of constitutional origin, that cancer is local at first. If such is the case, then there is no question of the operation being justifiable. But Allingham, [5] who says he is in accord with those who believe in the local origin of cancer, says, "Some varieties of cancer may, in their early stages, be only and purely local, but I am afraid that

1. *Am. Jour. Med. Sci.*, January, 1885.
2. *Am. Jour. of Obstetrics*, January, 1885.
3. *Am. Jour. Med. Sci.*, January, 1882.
4. Abdominal Tumors, 1885.
5. Diseases of Rectum.

stage is of very short duration and does not practically apply to the more malignant forms, and that as soon as a growth exhibits itself so as to be noticed by the patient it is already constitutional and the system is affected." Emmet [1] says, "There is now little room for doubt that the origin of these growths is local, and that they so remain for a period more or less lengthy after their appearance, and if recognized at this stage in a locality within surgical access, it is not too much to hope that they may be fully eradicated." Unfortunately, Allingham is correct, and when the case comes to the surgeon the disease is already constitutional. Then, should he refuse to operate, when there is still a chance of relieving a patient from a disease that renders her obnoxious to all, and makes life intolerable, and while there is still a chance to prolong life, if only for a few months?

I believe that all things being understood, if the patient wishes to take the chances, she should be allowed that privilege, especially as it has been shown that 39.2 *per cent.*[2] have survived the operation two and two one-half years. It may be urged that the patient might have lived that long if left without being subjected to the dangers and sufferings consequent upon an operation. Now let us see how long the disease takes to run its course when let alone. Schroeder[3] gives twelve to eighteen months (agreeing with Gusserow) as the limit in these cases, while other authorities, especially the English and American, place the limit at two and two and one-half years. We know that in most cases the disease has been in existence months before coming under the surgeon's notice. This, of course, should be taken into consideration in the estimate.

A. Reeves Jackson [4] says, "The only fair method of judging of any surgical procedure is to consider its results. If these be such as to lessen suffering and to prolong life, it is useful and hence proper." Let us now see how these remarks apply to cancer of the uterus. We are all of us familiar with the obnoxious odors which render life almost intolerable, as well as the irri-

1. Emmet's Prin. and Prac. Gyn., 1885.
2. Paul F. Mundé, Trans. Am. Gyn. So'y, Vol. IX, 1884.
3. Encyclopedia Prac. Med. Ziemssen, Vol. X.
4. *Jour. Am. Med. Assn.*, Aug. 15, 1885.

tating character of the discharges. These, together with the almost constant pain, make the patient willing to undergo almost anything, if she can be freed from them, and the extirpation of the disease, be it accomplished by the supra-vaginal amputation of the cervix, by the curette, by caustics, or by the total extirpation of the organ, is the only means which affords this relief, even if the disease returns.

Mundé, says[1] "I am convinced that in the majority of cases life is prolonged and, above all that, even if recurrence takes place, in by far the larger proportion the balance of life is greatly improved. The operation itself is almost always followed by a freedom from all distress for a considerable period, whereas before hemorrhage, discharges and pain tormented the patient; and if recurrence sets in, the distress is by no means equal that before the operation. Pain, particularly, is much diminished." Grandin[2] says, "Mundé quotes Olshausen and he might have quoted others to the effect that even if recurrence takes place, pain is much diminished and the distress by no means equals that before the operation." He, moreover, says he can bear personal witness to this, as it was his fortune frequently to attend Mundé's case up to the time of her death, eighteen months after the operation and nine months after recurrence, and her freedom from discharge, from hemorrhage and from pain was a constant source of wonderment when he remembered the presence of these factors in cases treated by the chloride of zinc, and followed by recurrence.

Are the dangers of the operation so great as to render the procedure unjustifiable on account of its high mortality? Mundé[3] has collected 254 cases with seventy-two deaths, or a mortality of twenty-eight per cent. To these can be added Fritsch's statistics published by Boekelmann,[4] twenty-four in number with two deaths, making in all 278 cases with a mortality of seventy-four or 26.65 *per cent.* To these can be added eight cases that I have heard of, not mentioning the three fatal cases referred to

1. Trans. Am. Gyn. Society, Vol. IX.
2. *Am. Jour. Obst.*, July, 1885.
3. Trans. Am. Gyn. Soc'y. Vol. IX., 1884.
4. *Archiv. f. Gyn.* Vol. XXV., 1884.

by Jackson as not having been reported,[1] three by Lane of San Francisco, one by Hypes of St. Louis, two by Bernays of St. Louis, one by Mundé of New York, and my own, five recovering from the operation, making in all, if we include Jackson's cases, 289, with eighty deaths, a mortality of 27.6. This is certainly in accordance with the hopes of the advocates of the operation that the mortality would diminish, as we became more and more familiar with the technique of the operation, and more judgment was displayed in the selection of proper cases. Jackson[2] cites 101 cases of Martin, Schroeder, and Olshausen, operated upon up to August of 1883, with a mortality of 38.6 *per cent.* This certainly shows that as the requirements of the operations become better understood the fatal cases decrease, as has been the case with abdominal and pelvic surgery in general.

In the discussion of this subject which is at present going on, opinion is divided as to the justifiability of the operation. Most of the English surgeons, Spencer Wells, Grailey Hewitt and Gallabin excepted, condemning it more or less strongly, as will be seen by a perusal of the discussion of the subject at the meeting of the Obstetrical Society of London, Jan'y 14 and March 4, 1885, as published in the *London Lancet.* On the other hand, most of the continental surgeons, so far as I have been able to learn, unless it be Billroth, who says in a personal letter to Spencer Wells[3], "Of what use are all our pains and art?" favor the proceeding in selected cases. In this country A. Reeves Jackson leads the opposition, while Paul F. Mundé heads those who favor the operation. Both have set forth their arguments in able papers read, the one at the meeting of the American Medical Association, held in New Orleans this last May, the other at the meeting of the American Gynecological Society, held in Chicago, Sept. 1884.

Now, granting that the operation is justifiable, in what cases should it be undertaken? Spencer Wells[4] says: "In cases where the fundus or body is affected, if any surgical measures

1. Trans. Am. Med. Ass., Aug. 15, 1885.
2. *Jour. Med. Assn.*, Aug. 15, 1885.
3. Abdominal Tumors, 1885.
4. Abdominal Tumors.

are admissible, excision by the vagina would be the resource to which our present knowledge inclines us." Keyelman[1] thinks the operation should be confined to cases of adenoma. Schroeder[2] thinks cancer of the cervical mucous membrane and of the body of the uterus always necessitates total excision of the uterus. Saenger[3] believes that *all* methods must sooner or later yield to total extirpation.

I am led to conclude from a careful study of the subject that the operation is justifiable in the following cases, if the patient desires it after all the dangers of the operation have been fully explained, as also the possibilities of imperfect removal and almost immediate return of the disease.

First, when the disease involves the body of the organ and it is freely movable, and no signs of the disease can be detected in the surrounding tissue.

Second, in cases of cancer of the cervix extending up so as to render the removal by less radical means impossible.

Third, when the body is not too large to be removed through the vagina.

Fourth, when the vagina is sufficiently large to admit of the proper manipulation.

Fifth, when there exists no constitutional disease, as tubercle, Bright's disease, etc., to contraindicate an operation.

Sixth, it should not be undertaken except for malignant disease, and when the diseased tissue cannot be fully eradicated by other and less radical means.

In presenting this paper to you to-night, I have endeavored to lay the subject before you as carefully as possible and without prejudice. I am sorry that my access to the literature of the subject has been so limited, but a lack of time has prevented my obtaining journals which contain the most pertaining to the subject and which were unfortunately not to be had here.

I hope to be able to report the progress of this case from time to time, as the husband of the patient has promised to keep me well informed regarding its progress.

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2. *Am. Jour. Med. Sci.*, April, 1883.
3. *Am. Jour. Med. Sci.*, Jan'y 1884.
4. *Am. Jour. Obst.*, Jan'y 1885.

I truly hope that she may survive sufficiently long to prove the justifiability of the operation, and that those similarly afflicted are not entirely without hope.

ASIATIC CHOLERA.

By W. C. Day, M. D., Winchester, Ill.

[*Read before the Medical and Surgical Society of Western Illinois, August 4, 1885.*]

THE birthplace of Asiatic cholera is on the banks of the Ganges, where it is endemic, but frequently prevails as an epidemic.

It is not a modern disease, having prevailed in that country for untold ages. As early as 350 B. C. Hippocrates described it accurately.

From its nidus there it has doubtless invaded, at different times, distant localities through the medium of travel.

Of its modern prevalence Sydenham speaks of the London epidemic which occurred in 1669.

It has been the scourge of armies, and vast bodies of crusaders and pilgrims have been destroyed by it, notably the irruption in Hurdwar on the Ganges, where in the short space of eight days 20,000 of these devotees succumbed to it. While the pestilence has raged with unabated fury betimes in its native land, it seems that the first historic account thereof which awakened interest and excited alarm in Europe was advanced by the British surgeons in the Indian service, portraying the formidable outbreak at Jessora, in the delta of the Ganges, August 1817, whence it invaded Europe and took its place in history as the first great epidemic of the disease. Resident British physicians had long been familiar with a disease of milder but similar symptoms which did not often result in death or fatal collapse. The Indian type of the disease had a mortality of more than fifty per cent., and was known to spread and propagate by means of a specific poison; it was named Asiatic cholera in contradistinc-

tion from the disease known in England as cholera, and now designated as sporadic cholera.

The germs were known to attach themselves to persons and things and spread along thoroughfares where travel was greatest. Hence, it was predicted that it would spread over Europe, which it did in 1831–2, gathering like a cyclone in the Southeast and sweeping to the great Northwest over the countries of Europe, devastating the populations in its march as nothing could do but a pestilence.

No barrier checked its progress. It passed over seas, oceans, mountains, elevated plains and lowlands; neither did the rigor of winter check its career. It has raged with unwonted fury in St. Petersburg and Moscow and in the northern portions of Norway and Sweden, in the midst of their extremely severe winters.

It crossed the Atlantic in 1832, and finally invaded every portion of our continent where intercourse was established by travel.

Since that time we have had the epidemics of 1848, 1854, 1866 and 1873. The history of the first epidemic is strikingly similar to that of all that have followed; and their methods of advance have always been the same, originating in the Southeast on the Ganges, and advancing Northwest over the countries of Europe, finally invading America.

We now anticipate another epidemic of this fell destroyer, in the near future.

It may not come this year, but it is safe to predict that it will soon pay us another unwelcome visit, as it is now raging with remorseless terror on the coasts of Spain.

Is epidemic cholera contagious? This is a question that has been discussed with a great deal of warmth and candor, and seems to be settled in the majority of professional minds that it is not, in the sense of contagion, as manifested in small-pox and scarlet fever.

Physicians and nurses, attendants upon patients with the disease, enjoy as great immunity as those who are isolated from contact with it and who reside under the epidemic influence.

Many curious facts prove that there is a peculiar atmospheric

state which promotes the spread of epidemic cholera, as it may be conveyed from place to place by persons who are themselves insusceptible to its influence.

It is defined by Bartholow as an "acute infectious disease endemic in some localities and epidemic elsewhere, and characterized by vomiting and purging of a peculiar rice-water-like fluid and a condition of collapse and the development of a typhoid state."

The theory that the disease is caused by a specific cholera germ best reconciles all the facts of the majority of investigators from the time of its first appearance in Europe to the present. More than a half century ago Sir Henry Holland, then an eminent English physician, adduced an ingenious but crude hypothesis of insect life being the cause of cholera and influenza. Kindred modifications of this hypothesis have gained credence in the professional mind during the past decades, until now, in the present enlightened age, the same idea is clothed in the euphonious expressions of bacilli, micrococci, microbes and spirilla. These minute organisms are now regarded as potent factors in the causation or result of many diseases.

Too much praise cannot be awarded those worthy men who have braved all obstacles and dangers in searching out the cause of pernicious diseases by the aid of the microscope and cultivation fluids, by which these germs can be detected, isolated, classified and their genera and species identified. Pasteur and Lister are the great pathfinders in this department of scientific investigation. They have made their names immortal and awakened kindred thoughts and stimulated further investigation in a host of other cultivated and brilliant minds, prominent among whom are Koch, Cheyne, Klein, Miguel and others. The honor is due to the illustrious Koch of first pointing out to the medical profession in recent times the comma bacillus as the invariable accompaniment of Asiatic cholera; a fact now admitted by the most competent investigators.

That these minute organisms are the direct cause of Asiatic cholera has by no means been accepted as a fact, but that they are connected in some way as cause or effect, is not now denied. The prevailing opinion seems to be that the comma bacillus is a

kind of scavenger, a benign and amiable sort of creature, but that its excretion or offspring, the pernicious ptomain, is the virulent cause of such sad havoc to human health and life. But with all our knowledge of bacteriology it is a sad comment at present, that, brilliant as the discoveries are, they have not been of any material advantage to that most important of all considerations—curing the malady. However little we yet know of these unsolved pathological problems, we are led to believe that the near future is replete with revelations that will remove from these the mysteries that enshroud them; and that those of us now in the prime of life will live to see disclosed the causes that operate to produce malignant cholera, and will be conversant with the means of assuaging its severity.

A consideration of paramount importance is the treatment of epidemic cholera.

I have had no experience in the treatment of the disease. Hence what I shall suggest I do not claim as original.

As prevention is more successful than cure, I will first present the importance of prophylactic measures. In this regard quarantine stands at the head. We know from the history of all epidemics that the disease has been imported from foreign shores by infected ships. If we could effectually prevent infected persons and materials from foreign countries landing on our shores until the cholera poison should cease to operate, then would our immunity from the disease be perfect, but as strict quarantine has proved defective and impractical, and in the near future will still be powerless to prevent its spread, then we must resort to other means more effectual nearer home.

These consist in perfect drainage, destruction of filth and garbage in our cities, towns, and villages, even to the farm residences, cleanliness of the inhabitants, pure drinking water, and wholesome living and temperate habits of the people. By means of heat, fresh earth and powerful disinfectants, combined with the means above enumerated, the cholera poison can be annihilated, as was effectually done in New York City during the epidemic of 1866. If at last we must meet the disease, we should be prepared to treat it in all its phases.

Almost everything that the imagination and ingenuity of

man could invent has been tried for the cure of cholera. Remedies often contrary to reason and afterwards known by experience to be pernicious have been given in this disease. Patients who have been rapidly exhausted by the copious rice-water purgings have been dosed with drastic hydragogue cathartics, whilst those on the eve of collapse, cold and blue, have been bled and re-bled. They have been blistered until sloughs have been produced that afterwards caused death from peritonitis.

A half century ago it was nothing unusual for half dram to dram doses of calomel to be given to patients and repeated every thirty minutes to an hour until several ounces of the drug were given in many cases; and, novel as it may appear, this treatment seems to have been very efficacious. Numerous cases recovered under this treatment wherein there had been collapse and suppression of urine for many days.

We claim with confidence in our present enlightened state of our science that our treatment is more rational and no doubt it is attended with better results.

In consequence of the terrible dread and panic incident to the scourge, it is essential at the outset to inspire hope and confidence. They buoy the patient up, whilst fear is the harbinger of death.

It is very important to recognize diarrhea and cholerine as a part of the disease, and remedies should be addressed to them immediately upon their first manifestation, and the remedy *par excellence* is opium in some of its forms. It is a constituent part of all the remedies, secret and public, relied upon, past and present, for the cure of the disease in its earlier stages.

As the discharges are alkaline, experience is in accord with the theory that acids are of great value. We might therefore formulate:

℞ Acid. sulph. aromat.,
Tr. opii deod., - - - - - aa ℥j.
Sig. Ten to thirty drops every hour; or,
Sulph. acid. dilut. - - - - ℥ss
Tr. opii camph., - - - - ℥iss.
M. Sig. Teaspoonful well diluted every one-half to two hours.

Spirits of chloroform as well as tincture of cinnamon may be

added. Chlorodyne is said to be an excellent remedy. If the symptoms are very urgent a hypodermatic injection of morphine and atropia sulphate is very efficacious. Quietude of body and mind must be enjoined. Mustard plasters will aid a great deal in arresting the vomiting; and if the thirst is excessive ice should frequently be given and the patient encouraged to swallow pellets of it frequently. Other remedies for vomiting are carbolic acid and bismuth, chlorodyne, hydrocyanic acid dil., chloroform, tr. camphor, and chloral. The hypodermatic injection of chloral in this stage where it is attended with cramp is said to be superior to all other remedies. Twenty grains dissolved in sufficient water may be injected every hour or two; it allays cramps and promotes quietude. In the algid stage hypodermatic injections of atropia sulphate is the best to arouse action of the heart and produce warmth of the body. Nitrate of amyl inhalations serve the same purpose.

Whiskey may be injected under the skin in the collapse of cholera. Marvelous temporary effects have been produced in the collapse stage by the intravenous injection of salines, but unfortunately the good effects are seldom permanent. In algid cholera the intravenous injection of milk has proved more successful. May we not anticipate great benefits from this method in collapsed cholera in future epidemics?

RECENT SCIENTIFIC PROGRESS IN PATHOLOGY.

By L. A. Merriam, M. D., Omaha, Neb., *Professor of the Principles and Practice of Medicine in the University of Nebraska College of Medicine, Lincoln, Neb.*

During the last few years several valuable discoveries have been made in pathology, a few of the most important of which I shall briefly call to your attention, not endeavoring to demonstrate their truth but only pointing you to some of the ideas held by the best minds in the profession. From these we can gather the drift of pathological inquiry and from the discussion that their presentation will excite we can make them of service to us in our study of disease.

The first to which I call your attention is that traumatic diseases arise not from the trauma itself but from the development of septic processes in it, and that this can be prevented by mechanical and chemical means. This has been so thoroughly demonstrated in practice and so fully recorded in recent literature and is so familiar to you all that a simple allusion to it is all that is necessary.

Another discovery, which is closely related to the first, regards the nature of the material cause of the so-called contagious or infectious diseases. Evidence has been and is accumulating that certain minute organisms of various kinds found in the animal tissues are the direct causes of the particular diseases in question. Pasteur, Lister, Klebs, Koch, Klein, Cheyne, Tommasi-Crudeli, Wood, Formad and Sternberg have been the leaders in developing the truths of the germ theory and the history of pathology is now in great measure made up of this branch of inquiry. These germs of disease belong to the smallest units of living matter and lie on the borderland of the invisible. They belong to the vegetable kingdom, they are of the fungi, the schizomycetes and are classed according to their form as cocci, bacteria, bacilli, vibriones and spirilla, and are so minute that Naegeli says it would take two trillions of them (2,000,000,000,000) to weigh one grain.

The pathological inquiries concerning the etiology of cholera remain still unsettled, the weight of evidence being very largely in favor of Koch's comma shaped bacillus. Koch maintains that not all comma shaped bacilli are cholera bacilli, the distinction being made by their modes of development and peculiar staining properties. Koch maintains that morphological similarity is not the same thing as actual identity when dealing with bacterial organisms. Dr. Klein and his colleagues have been putting Koch's ideas to the severest tests, but in spite of the checks thus administered it would not be surprising, judging from the facts presented, if research should eventually prove that Koch's ideas are very near the truth.

Tuberculosis has, perhaps, engaged the greatest attention and Koch's bacillus tuberculosis is perhaps the most pressing question of the day. Spina, of Vienna, has been Koch's strong

opponent, but even in Vienna Koch's views are gaining ground, and the pathological unity of phthisis is now held by the leading minds of the profession.

Pasteur's researches into the nature of the virus of rabies and its mode of action on the body together with his discovery of protective inoculation is one of the most interesting topics at present under discussion. This discovery that one kind of animal can mitigate the virulence of the morbid product of another is one of the most remarkable that has been made in the history of the race, and is only as yet in its infancy. It has been applied successfully for three-quarters of a century to the mitigation of that once terrible scourge, variola, and during the last few years has been extended to rabies, chicken cholera, anthrax, scarlatina and yellow fever. What wonderful results may be obtained by the development of this law in mitigating the severity of infectious diseases the future alone can determine.

The virus of anthrax or charbon has been worked out by M. Osol and Prof. Semmer, of Dorpat, and they conclude that there exists in the blood of animals affected with these peculiar bacilli a specific non-volatile chemical substance soluble in water and exerting such an influence upon indifferent micro-organisms as to transform them into charbon bacilli. If this be true as stated, it furnishes another argument in favor of the idea that one so-called specific disease may under certain conditions be transmuted into another allied disease. Darwin's Origin of Species has revolutionized our ideas of animal and vegetable forms and their relations to each other, and evidence is rapidly accumulating to prove the truth of the above statement. As to the nature of this evidence I will only instance rubeola or common measles and roetheln or German measles; again the variola and varicella; also the different types of fevers, as malarial, typho-malarial and typhoid. Other instances will no doubt occur to you all.

Friedlaender's discovery of a micrococcus in acute fibrinous pneumonia has been confirmed by other observers. A bacillus in glanders has been demonstrated by Bonchance of France, by Schulz and Loeffler of Germany, and by Vasilieff of Russia, and confirmed by many others. M. Friere, of Rio Janeiro, has

since 1880 been experimenting in yellow fever and has demonstrated it to be caused by a parasite and to be preventable by vaccination with attenuated virus which he obtained by passing the germs through guinea pigs. He inoculated two hundred laborers with the modified virus and afterwards exposed them to the most severe influences of yellow fever and not one of them contracted the disease, while hundreds of others were rapidly dying around them.

Neisser's discovery, made in 1879, of a micrococcus in gonorrhea has been confirmed by Sternberg and by Bockart, of Wurzberg. Evidence is accumulating to confirm the discovery of a micrococcus in acute pneumonia, leprosy, erysipelas, scarlet fever and acute osteo-myelitis, a bacillus in typhoid fever and in malignant edema, while Beltzow has found two distinct morphological varieties of bacilli in pyemia.

Diphtheritic membranes, long regarded as pure exudates, are now known to be masses of necrosed tissue caused by a micrococcus.

There is a growing interest in all pathological inquiries, and neural pathology bids fair to take a prominent part in the pathology of the future.

The evolution hypothesis, as taught by Herbert Spencer and his disciples, is being applied to the study of morbid histological changes, especially that part known as the law of dissolution, or retrograde metamorphosis, to the embryonic condition as a simpler type of life.

Dr. Dohrn, of Naples, calls this the law of degeneration; but he applies it only to the changes in zoological forms. Prof. Stricker, of Vienna, accepts the same law as applying to all inflammatory processes.

Hughlings Jackson, of London, sees in this law the explanation of many nervous and mental diseases, particularly that of insanity, and the writer of this paper has applied this law to all pathologico-histological changes of whatever name or nature, as may be seen by consulting a paper read before the Douglas County Medical Society, September 2, 1884, and published in the Courier of Medicine November, 1884, and entitled Degeneration the Law of Disease.

That it is the great law that regulates all pathologico-histological changes we have abundant reason to hold, and I believe, with this guiding principle ever clear in mind, we will be enabled to solve many an intricate problem in disease otherwise inexplicable.

Considerable attention is being paid by histologists and pathologists to the pathological relations of the absorbent system.

The serous cavities are now regarded as parts of the lymphatic system, except the peritoneal, which is held by Ziegler to have been originally a part of the primitive alimentary cavity or archeuteron.

Certain skin diseases, such as erythema, have been attributed to inflammation of lymph rootlets due to changed innervation, while changes in the lymphatics seem to constitute an important element in the morbid anatomy of elephantiasis, and several other affections.

Hogan has recently described multiple lymphatic nevi of the skin which form the initial stage as predisposing pathological condition of such diseases as lymphatic varix of the larger vessels, and also enter as an important factor in the production of elephantiasis.

Prof. Kocher, of Berne, has made some observations upon individuals who had undergone extirpation of the thyroid gland, and who had shown a special cachexia similar to myxedema in its clinical features. The old idea of a cell with limiting membranes, nucleus, nucleolus, etc., has nearly passed away and given place to a more correct one, viz., that the so-called cell is but a mass of bioplasm, or, as some call it, protoplasm, formed by the intersections of the lines of living matter; and Heitzmann, of New York, has demonstrated that this reticular arrangement exists in nearly all the structures of the animal body. Hence, the cell theory as it has been understood by all is no longer tenable. It is not denied that cells thoroughly specialized, highly differentiated structures do exist, such as fat cells, epithelial cells and other cells which are fully formed, adult, mature. Cohnheim's theory of the origin of neoplasms in embryonic remains has been much weakened by recent discoveries, and the law of Virchow that the elements of a tumor are de-

rived from the normal preëxisting structures of the organism, which, as we say, have undergone degeneration induced by local irritations and nerve influence is receiving substantial support.

Heterologous tumors have been held to signify growths that do not in their structure resemble any of the natural tissues of the body, whereas, while they do not resemble the adult or fully formed tissues of the body, they always do resemble some of the natural tissues when in an immature or embryonic state.

The old idea that cancers are transmitted from parent to child is not strictly speaking true: hence this idea is no longer held.

Cancers, and, in short, all tumors are now held to be always first local, and the degree of malignancy is in proportion to the amount of degeneration, for it is a law of nature that the lower the grade of development of an organism the greater is its power of life, reproduction and growth. Among the books recently published on pathology and worthy of especial mention are the following, viz., A work on Practical Pathology by Dr. G. Sims Woodhead, of Edinburgh. This is an excellent guide to the practical work involved in the study, preparation and examination of morbid tissues. Dr. Joseph Coats, of Glasgow, has recently given the world a most excellent Manual of Pathology, covering both the ground of Pathological Anatomy and General Pathology. Dr. Hamilton, of Aberdeen, has published an original and suggestive book on the Pathology of Bronchitis. Cornil and Ranvier's recent edition of their Manual of Histology and Pathology is an excellent contribution.

Ziegler's Text Book on Pathological Anatomy is perhaps better than any other recent work. Two volumes have been already issued and the third is said to be rapidly approaching completion.

Many other items of progress might have been noticed in this connection did time permit, or those given might have been amplified to a much greater length, but, deeming these of paramount importance and, though briefly stated, worthy of your attention, I submit them for your free criticism and thorough discussion.

CASES FROM PRACTICE.

MULTIPLE ABSCESS OF THE LIVER.

By C. M. Witmer, M. D.

[*Read Before S. E. Missouri Medical Association.*]

March 3, 1882, I was called to see Benj. M., æt. 32; married; occupation, painter; resided two miles in the country.

When I arrived the patient was sitting up in bed, just recovering, as he said, from a severe attack of cramp colic. He attributed his rapid recovery to a large dose of morphine which he had taken about an hour before.

He said he had followed the occupation of painting for fifteen years.

Two years ago he had his first attack of colic. Since that time he had had attacks at irregular intervals up to date. In every instance morphia gave permanent relief in from three to four hours.

The pain he described as being intolerable; he would be drawn into a knot and held as if in the clasp of a vise. In fact, he suffered all the agony that attends an ordinary attack of lead or hepatic colic.

He referred the severest pain always to a point a little below and to the right of the umbilicus.

One year ago he had a slight hemorrhage from the lungs.

Six months ago he was confined to his bed for four weeks with some form of continued fever. His convalescence from this sickness had been very slow and unsatisfactory, being in a condition otherwise far from healthy at the time I saw him.

Although full doses of morphine relieved him of pain, he generally suffered much afterwards from prostration, often having chills and slight fever for a week or more.

On examination I observed that he was much emaciated, very anemic, skin of a dusky bronze color, the eyes dull and the sclerotic of a muddy, hardly a yellow color. His teeth were in a very foul condition, and a blue line extended along the margin of the gums, as is common with persons of his occupation who pay little attention to their teeth. Tongue heavily coated, tremulous, showing indentation of the teeth; pulse slow, full and regular; bowels constipated; lungs nearly in a normal condition, some evidence of chronic bronchitis being all I could discover; spleen normal; kidneys natural; urine of a port wine color, heavily loaded with bile pigment, giving a brilliant play of colors to the nitric acid test, the only test I was able to make. The liver was greatly enlarged, dullness elicited as low down as the umbilicus on the right side and as high as the fifth rib. Just below the ensiform cartilage was a very tender spot, about the size of a silver half dollar. The least pressure over this caused intense pain and vomiting.

Judging from his occupation, the blue line along the margin of the gums, and the constipation, that lead poisoning was present, and in part if not entirely responsible for the colic, I prescribed iodide of potassium in fifteen grain doses, three times a day. Also

℞ Magnes. sulph., - - - - - - ℥i
Acid. sulph. dil., - - - - - - ℥ij.
Morph. sulph., - - - - - - grj.
Aquæ, - - - - - - ℥iv. M

Sig. A tablespoonful every four hours.

I saw my patient three days afterwards. He was in a much improved condition, eyes clear, tongue clean, bowels loose; bronzed appearance of the face almost entirely gone; urine still too dark; dulness over the right lobe of the liver diminished in extent, still the area of dulness much too large.

He said he felt as well as a new man except being very weak.

Prescribed iron and quinine after meals.

March 17, fourteen days after my first visit, I again saw my patient. He had not had another attack of colic, but all of the symptoms referable to the liver had returned. Pain over stomach was very severe. Vomited almost constantly quantities of mucus blood and ochre-colored fluid, probably blood and bile. A dull aching pain was present in the posterior portion of the right lobe of the liver, flashes of pain being reflected upward to the right axilla; urine very dark, obstinate constipation; area of dulness over

the right lobe of the liver as great as at first. Under the ensiform cartilage could be felt, by careful manipulation, a small nodular surface. I was unable to determine whether it was a portion of the anterior wall of the stomach, the left lobe of the liver or the gall bladder greatly distended. He was slightly jaundiced, but this disappeared as the case progressed. He attributed his unfavorable symptoms to exposure and negligence in regard to his diet. Hypodermic injections of morphine at last controlled the vomiting, and enabled him to retain a small quantity of milk and lime water. As soon as the effects of the opiate began to die out, vomiting would return. The next day he had fever; temperature was 101° in the morning and 102.5° in the evening. The pulse remained full and strong, at no time making more than 105 pulsations in a minute.

The gastric symptoms were so severe and prominent that with the nodular surface over the anterior portion of the stomach, I was at first inclined to think there was some lesion of its walls.

But the disappearance of the gastric symptoms in the course of a week or two caused me to refer the nodular surface to a distended gall bladder, or to the left lobe of the liver.

For the constipation I prescribed pil. comp. cathartic, No. iv. The only stool obtained consisted of a mucous cast of the intestines some five or six inches long.

From this time forward he had chills occurring at irregular intervals, followed by fever, profuse sweats and great prostration. Complained very little of severe pain anywhere, except on moving his body. Nothing whatever relieved the constipation, except enemata of a stimulating character. These were used every day. The chills came and went at irregular intervals, the range of temperature being from 101° to 103°; each return of the chills showed more and more their hectic nature.

Quinine in large doses, fifteen grains three times a day, was given, at first with good results; then the dose had to be increased, and at last withdrawn altogether. At suggestion of Dr. Boyd compound tincture of iodine was used, with exactly the same result. And so the usual list of remedies was tried and abandoned, the case steadily progressing toward a fatal termination. At the end of the sixteenth day, I saw the patient with Dr. Study. We thought further medication useless. So good nutritious diet and careful nursing were all that was advised. At the end of the seventieth day the patient died of exhaustion. Examination showed left

lobe of the liver normal, the right lobe greatly enlarged and firmly adherent to the diaphragm and intercostal muscles. The right lobe of the liver weighed ten pounds and was completely filled with pus cavities which had no defined limiting membranes, large cavities coalescing with the smaller ones. A number of the largest cavities on the posterior portion of the right lobe had perforated the adherent peritoneum and were dissecting their way through the intercostal muscles. The whole amount of pus must have been near a half gallon. The gall bladder was greatly distended and completely filled with gall stones. Projecting upward and forwards was a diverticulum of the gall bladder completely packed with stones. This was the nodular surface felt just below the ensiform cartilage early in the case. These gall stones were nearly of a uniform size, the largest only weighing ten grains. They were prismoidal in shape and consisted principally of cholesterine. There were forty-four of them.

Inflammatory action had been going on along the course of the ductus communis choledocus, causing the duodenum to be tightly bound by constricting bands of inflammatory material to the gall bladder. The canal of the bowel was so constricted as to make it difficult to force a finger along its course. I thought perhaps this might account in some measure for the vomiting and intense pain in the region of the stomach. The rest of the viscera seemed to be in nearly a normal condition. I have since placed one of the gall stones in a vial containing Durand's remedy; ether two parts, turpentine one; also one in Boucat's remedy, pure chloroform. The one in Durand's remedy partly dissolved in forty-eight hours, the one in Boucat's remedy dissolved in twenty-four hours.

NOT TRUE ALONE OF THE BAPTISTS.—At the late Virginia Baptist (colored) Convention, an enthusiastic member said: "Let every one here who takes a Baptist paper hold up his hand." Up went the hands, and just then the editor of the *Baptist Companion* cried out: "Now, let those who pay for their papers hold up their hands." This time fewer hands went up.—*Pittsburgh Presbyterian Banner.*

It is to be apprehended that if at any convention of physicians similar inquiries were put in regard to medical journals the result would be very much the same.—*Gaillard's Med. Jour.*, Aug. 1885.

A CASE OF OVARIOTOMY.

By W. W. Nye., M. D., Hiawatha, Kansas.

[*Read before the Northern Kansas Medical Society.*]

Mrs. S ——— married, æt. 47, mother of two children, consulted me in the summer of 1882, complaining of the following symptoms: Dull pain in the right iliac fossa and extending down the right limb; local fatigue after exertion. Her digestion was impaired, bowels irregular, and she experienced difficuity in voiding urine.

Treatment was directed to the most prominent and distressing symptoms with a request to return from time to time, which she did. Living nine miles in the country, and the ride tiring her, she did not call often.

All my efforts to offer relief proved unsatisfactory.

A vaginal and abdominal examination was made August 25th, 1882, at which time I became convinced that a tumor existed. She had passed the change of life, so pregnancy could be excluded. A hard, resisting mass with points of fluctuation was discovered, which produced abdominal enlargement visible upon inspection.

As to the character of the tumor I was then unable to decide. I obtained a full history of the case, took notes of all salient points, and requested time before expressing an opinion, with the understanding that she should call and see me if anything new developed in the case. Nothing occurred worthy of mention save an occasional prescription until July 4, 1883, when she called at my office; she had failed in strength and lost flesh rapidly. I had, in the meantime, given the case more study, and ventured the opinion that she had an ovarian tumor. After explaining to her as best I could the nature of her case and the certain result without an operation, and the possible termination with one, she decided in favor of an operation.

A consultation was held; the diagnosis was confirmed, and an operation advised.

One week previous to the day of operating she was brought to town and given some preparatory treatment; daily sponge baths were given to insure healthy action of the skin. The bowels were regulated so far as could be, diet was prescribed, etc. The night preceding the day of operating she was given calomel gr. x,

sodæ bicarb., gr. xx. On the following morning, an hour previous to the operation, an enema consisting of warmwater and soap with inspissated ox-gall was administered, the bowels thoroughly cleaned out and the bladder emptied.

Everything necessary to the operation having been prepared with care and antiseptic precautions so far as possible, at least so as to come within the limits of strict cleanliness, the operation was made August 26th, 1883, assisted by Dr. J. M. Richmond, of St. Joseph, Mo.; Drs. Bliss, Logie, Lewis and Wood, of Hiawatha. Squibbs' sulphuric ether was administered. I will here state that to insure the best physical condition for the operation and procure undisturbed rest for the patient during the previous night and to guard against the ill effects of over-anxiety, an anodyne was given.

The incision was made along the linea alba about an equal distance from the umbilicus at one end and from the pubes at the other; the abdominal fascia was laid open on a grooved director, likewise the peritoneum; the first incision was then enlarged to about six inches, the cyst wall being brought plainly into view. A steel sound, such as is used for the male urethra, was then introduced into the cavity, and adhesions were found to be slight. An improvised trocar, mounted with rubber tubing one-half inch in diameter, was then plunged into the exposed cyst at a point free from blood vessels, and the contents were withdrawn, consisting of a dark gelatinous fluid, measuring about three gallons. A portion of the contents of the smaller cysts was so thick as to necessitate the introduction of the hand for its removal.

Only two or three adhesions were met with. Only one to the omentum required a ligature. The pedicle was about two and one-half inches broad and three inches long, attached to the right ovary and broad ligament.

A point in the pedicle free from blood vessels was selected through which was passed a needle carrying a double thread, forming a loop; the loop was cut forming two ligatures—one passed around the other, tieing the pedicle in two sections.

It was then dropped back into the pelvic cavity. All oozing and bleeding being arrested, the incision was closed with nine silk sutures. A strip of protective two inches broad was placed over the incision, and over this several layers of antiseptic gauze and absorbent cotton; a piece of mackintosh large enough to reach from the pubes to the ensiform cartilage and from one crest of the ilium

to the other was laid between the outer layers of gauze, and a flannel bandage completed the dressing. The operation occupied one hour and twenty minutes. After the operation temperature was 96° F. pulse 120.

Efforts were then made to bring about reaction, heat was applied to the body, an enema of beef tea and brandy was given.

At 6 P. M. six hours after the operation, temperature 100°, pulse 116, a morphia suppository ¼ gr. was inserted into the bowel, and she passed a comfortable night.

August	27th,	6 A. M.,	temperature	99.8°,	Pulse	86.
"	"	12 M.	"	99.2°	"	100
"	"	6 P. M.,	"	100.6°	"	100
"	28th,	6 A. M.,	"	98.8°	"	84
"	"	2 P. M.,	"	99.4°	"	84
"	"	6 P. M.,	"	98.2°	"	84
"	29th,	6 A. M.,	"	99.4°	"	80

The temperature and pulse did not vary much from the preceding during the next few days; temperature was normal and pulse 72 Sept. 2.

She did not take more than one grain morphia and was nourished for the first thirty-six hours by enemata of beef tea. A little ice was given to quench thirst, an injection was given on the eighth day, also some solution of citrate of magnesia to move her bowels. The wound was dressed on the ninth day, and union by first intention had taken place; the sutures were then removed, and adhesive strips applied. These were allowed to remain a couple of weeks so as to support the parts. She continued to wear the bandage two or three months and returned home well in five week's from the time of the operation.

The tumor was multilocular and weighed thirty-five pounds.

It would be presumptuous for me to draw any conclusions from my limited experience, but I cannot but feel that the success of the operation was due in a measure to the attention given to details and the use so far as possible of antiseptic precautions. I also feel that it is not necessary to saturate the patient with morphia or some other preparation of opium for the first few days after the operation, and that the preparation of the patient for the operation increases the chances of success, and that there is an advantage in using a large sized trocar or tube as recommended by Thomas

Keith, of Edinburgh, to draw off the contents of the cyst, thus avoiding unnecessary delay, shortening the time of the operation, and avoiding the prolonged use of an anesthetic.

Effects of Salicylic Acid.—The Comité d' Hygiéne has been twice consulted by the Minister of Commerce concerning the practice of adding salicylic acid to drinks and articles of food. That body declared it to be dangerous to public health. The subject will be discussed at the Académie de Médecine.— *Brit. Med. Jour.*, Aug. 8.

The St. Louis Fair opens this year October 5. The premium list aggregates $73,000, distributed among the various departments. The grounds of the Association have been enlarged by the purchase of sixty-five acres of ground lying directly west of the old ground, and half a million dollars have been expended in this purchase and other improvements. In these are included the laying out of a full mile race track, the construction of a large number of new stalls for horses and cattle, a poultry house and twenty-eight other new halls for exhibits and pavilions. In addition to the usual exhibitions in the great amphitheatre there will be races on the track every afternoon during fair week.

Arrangements have been made for another grand illumination of the streets of the city during the evenings of that week. Those who have been in position to speak from personal observation say that the illuminations in the city of Paris during the brightest days of the French empire did not approach the magnificence of the illuminations in the streets of St. Louis during the last two years. The illumination this year will be more beautiful and brilliant than ever before.

Tuesday evening, October 6, the annual procession of the "Veiled Prophet," will take place, and on Thursday evening the Trades' Procession.

The railroads and steamboats will transport passengers to and from the city for one and one-third fare for the round trip. No better opportunity is afforded a physician to see what progress the world is making in other lines than in those of direct professional interest than by visiting St. Louis during Fair Week and attending the Fair.

EDITORIAL.

ON THE THERAPEUTIC USE OF THE COLD DOUCHE UPON THE FEET.

M. Caulet, Medical Inspector at the watering place of St. Saveur, has published a memoir upon this subject which we find noticed in the *Journal de Medecine et de Chirurgie Pratiques*, July, 1885.

In the numerous cases in which M. Caulet has experimented, he made use of water at 8°–10° C. (44.5°—50° F.) from a reservoir raised ten metres (thirty-two ft.) with a jet fifteen to eighteen millimetres (seven-eighths to three-fourths inch); with that pressure a smaller jet would be too painful. The patient, with bare feet and legs, is seated behind a screen, which protects him from spattering, the lower limbs being passed through two holes arranged for the purpose, and resting with the soles of the feet upon the ground. The douche ordinarily strikes only the top of the foot and the lower part of the leg; but some persons, especially women, who, in this respect, are less sensitive than men, receive it also upon the soles of the feet. It should be prolonged as much as possible. At the first moment the impression is not at all disagreeable; but little by little the first sensation becomes painful, then the suffering becomes intolerable. Few persons are capable of remaining under the douche three minutes, two minutes, or even a minute and a half. Very rapidly, then, the reaction takes place spontaneously, and the warmth which results persists all the day. These local phenomena are, moreover, not the only ones, and the douche is accompanied with effects which show that its action is much more general than one would think at first.

The cold douche upon the feet is primarily indicated in patients whom one desires to prepare for complete hydropathic treatment. In many cases it is much preferable to the general douche, whose management is very delicate, the reaction here always occurring promptly and without difficulty. It has a special, very remarkable indication in persons subject to cold feet. The results obtained by M. Caulet have always been especially satisfactory in that affection when it is associated with a neuropathic state, and in the so-called *essential* cold feet associated with vascular inertia of the region. That state, so frequent in sedentary persons, in children at convents and boarding-schools, is so favorably modified by this form of douche, that M. Caulet would wish to see the use of it become general in them, and even in barracks. No measure would be more easily applicable nor at less expense, since the operation demands only a few minutes, and may be practised by any one; and, finally, the necessary instrument, always very simple, may be reduced at need to a spout of cold water, under which the patients should expose their feet. The coincidence of an affection of the utero-ovarian apparatus, even of congestive nature, is not a contra-indication, he claims; for, far from congesting the womb, the douche upon the feet is a most excellent means of combatting the hemorrhagic congestion, and of repressing the losses of blood.

The cold douche upon the feet is a good revulsive to relieve the head or the chest; it combats very surely cerebral congestion. It constitutes the most effective agent for thermal treatment of that singular affection which, preceding for several years the menopause, is characterized by thermesthesia of the face, with or without acne rosacea, by a state of permanent molimen and flushes of heat to the head, finally by local anemia, with chilling of the lower extremities.

The cold douche upon the feet is, with the intestinal douche, the most widely useful hydropathic agent in nervous diseases. It succeeds very well ordinarily in dissipating instantaneously the thousand miseries and accidents, more or less transient, which distress

neuropathic patients, but it is also remarkably efficacious against fixed and permanent manifestations, especially when they are seated in the head, and in these cases it would appear to act better than the general douche. It would deserve to become the common remedy for cephalalgia; it is useful in all its varieties, and acts almost always marvellously. It dissipates instantaneously the weight, and pain of occasional and of pure nervous headaches, of the hyperesthesia of the scalp and epicranial muscles which last for weeks. It would appear to be also a good treatment for migraine.

Finally, it constitutes a very sure remedy for insomnia. It procures sleep when antispasmodics, calmatives and hypnotics accomplish nothing.

ABORTIVE TREATMENT OF TYPHOID FEVER.

In the *New York Medical Journal* for August 15, 1882, appeared a paper on typhoid fever, by Dr. Edwin R. Maxson, of Syracuse, N. Y., in which the author advocates what he calls an abortive treatment of this disease.

The indications for treatment, he says, are "to destroy or neutralize the poison in the blood; unload the liver; call the skin into action, thus reducing animal heat; to call the circulation to the extremities; to sustain the powers of the system; to subdue abdominal, thoracic and other irritations, and especially gastro-intestinal; to suitably nourish, and to keep the patient properly encouraged." He claims to have succeeded in nearly every case during the last ten years in meeting these indications and arresting the course of the fever within one week.

To destroy the poison in the blood he gives to an adult four grains of the sulpho-carbolate of sodium every six hours—at six, twelve, and six o'clock—dissolved in a teaspoonful of water. As an additional antiseptic, and to support the powers of the system, he gives two grains of cinchonidine with ten drops of tincture of

the chloride of iron every six hours, alternating with the sulphocarbolate, in four ounces of warm crust coffee without milk; and he orders the continuance of these remedies for a week after discontinuing attendance upon the case.

To unload the liver he gives one improved C. C. pill at first, and one daily if constipation is present; but otherwise a one-grain pill of leptandrin daily until the tongue clears off, and afterwards one or the other only as may be indicated by constipation.

To equalize the circulation and stimulate the action of the skin, and thereby reduce the temperature, a warm foot bath is used morning and evening until the fever is arrested, the skin becomes soft and the temperature normal. This he states will ordinarily occur in three days by the aid of warm drinks, required for nourishment, and strict avoidance of everything cold internally and externally.

In rare cases where the headache continues in spite of such treatment, a teaspoonful of blood is taken by cups from the back of the neck or blisters are applied back of the ears or to the back of the neck.

To subdue irritation of the thoracic or abdominal viscera, he applies daily, morning and evening, from the onset of the disease, warm sinapisims over the whole chest and abdomen, taking care not to blister but to produce decided reddening of the skin. He continues these until all the symptoms of the disease have disappeared.

No cold drinks are allowed. He gives only warm "crust coffee," one-half milk, for drink and nourishment, thus favoring perspiration. Plain, nourishing food at regular meal times only is given, when tolerated, with tea if desired.

The patient is encouraged to keep dressed and out of bed in the day time, reclining on a couch or in an easy chair at will.

This constitutes what Dr. Maxson calls his abortive treatment. If from any cause, such as neglect, or unhygienic surroundings, the disease continues more than a week, he would treat any inflammations which may have arisen by means of cups, blisters, etc., and

the gastro-intestinal disease especially by blisters to the epigastrium and abdomen if necessary. The only addition to treatment already outlined—except to meet emergencies, as diarrhea, hemorrhage, etc.—would be to give eight drops of turpentine in emulsion, as an alterative for the gastro-intestinal disease, and two drops of the tincture of nux vomica with the sulpho-carbolate, as a tonic for the digestive organs and nervous system.

Dr. Maxson makes no statement as to the number of cases in which he has pursued this course of treatment, but claims that not only in typhoid fever is this treatment abortive, but in "all putrid fevers—as typhus, diphtheria, spotted fever, etc."—it is equally effective, and cuts short "scarlet fever and measles nearly one-half."

HYPERTROPHY OF THE PROSTATE—RETENTION IN THE BLADDER OF AN ENORMOUS QUANTITY OF GRAVEL.

Dr. Locquin contributes to the *Journal de Medecine et de Chirurgie Pratiques* a remarkable case of a man to whom he was called in consultation in 1883. For some time he had been able to void his urine only a drop at a time. The distended bladder was felt above the pubis, but every attempt to evacuate it failed. A large sound was easily introduced to its full length, but remained absolutely dry.

June 20, on visiting him, he was found in the posture which had become habitual, half sitting, resting with one hand upon the side of his bed, holding with the other the vessel still empty; his whole body agitated with a convulsive trembling and wearing himself out to pass a few drops of bloody urine. Placing the patient upon the bed, M. Locquin examined per rectum, and found the prostate quite regular in shape, but enormous, hard and situated very high up behind the pubis. The patient was very obese, and abdominal palpation was difficult and gave imperfect infor-

mation. However, on percussion with care one could define a hard rounded mass, reaching up to the umbilicus. A bulb tipped sound easily traversed the urethra. On reaching the bladder it gave a characteristic rubbing sensation. It was impossible to introduce a metal exploring sound. A No. 20 rubber catheter entered the bladder, and gave the same rubbing sensation, but gave passage to no urine.

Much astonished, he concluded that the catheter was obstructed, and injected a small quantity of warm water, giving a sharp stroke upon the piston, as is taught by Prof. Guyon. On quickly withdrawing the cannula fluid escaped, bringing with it a spoonful of little rounded gravel stones of regular form, as large as grains of rape seed. The same operation repeated several times gave the same results. This was continued the following days by M. Guillabert, who thus at length extracted a litre of gravel. The bladder then was a regular sand bank. The urine coming from the ureters filtered slowly through this, and was discharged as rapidly. In spite of the compression which this mass exercised upon the walls, there were no symptoms of dilatation of the ureters, nor of lesion of the kidneys by distention of the pelves. The urine contained neither pus nor albumen.

Analysis of the gravel showed that they were almost pure urate of soda. Since that time the patient has not suffered any more. The catheter is used twice a day and the bladder is washed out with a borated solution. These injections often bring away one or two grammes of the same gravel, but smaller.

TREATMENT OF ACUTE RHEUMATISM.

One of the subjects discussed in the Section of Medicine at the Cardiff meeting of the British Medical Association was that of the treatment of acute rheumatism. The address introducing the discussion was made by Dr. J. S. Bristowe. Reviewing the experiences of his practice until within a few years, he said that having

tested the various methods of treatment, which had been advocated by one and another, and which had gained more or less popularity, he had become satisfied that none of them either shortened the course of the disease or diminished its liability to complications. He had come to rely upon careful nursing, local applications for the relief of pain and inflammation, internal remedies to act on the emunctories or procure rest or ease, treating complications as they arose and giving tonics as soon as they seemed to be indicated. He had, in fact, virtually adopted an expectant treatment.

He referred more at length to some of the modes of treatment which he had tried and discarded, viz., the administration of nitrate of potash, largely diluted and in quantities of an ounce or more daily; giving every two or three hours twenty-grain doses of bicarbonate of potash to neutralize the acid which was supposed to pervade the system, and to render the urine alkaline, as was taught by Dr. Fuller; applying blisters to the inflamed joints, after the plan of Dr. Herbert Davis.

The introduction of salicin and its relations, salicylic acid and salicylate of soda, had, he said, wrought a complete change in his own views and practice, as well as in that of many others. Being somewhat of a therapeutic skeptic, he was not among the first to adopt the new treatment, but experience, now extending over a number of years, had convinced him that the curative powers of salicin over acute rheumatism are as decisive and unquestionable as are those of quinine over ague, or of mercury and iodine over syphilis.

The influence of the salicyl compounds upon the febrile temperature of acute rheumatism is most remarkable. Generally, when large doses are administered at short intervals, as twenty grains every two hours, so that the patient becomes speedily saturated with the drug, the temperature speedily falls to the normal in a day or two. Generally the pains abate *pari passu* with the lowering of the temperature, though, as would be naturally expected, the other

results or accomplishments of inflammation, such as swelling and effusion, disappear much less rapidly. Occasional cases obstinately refuse to yield to this treatment. Cases in which the temperature does not fall upon the administration of the remedy are not likely to be so favorably affected in other respects either. Cases in which one joint is affected alone or disproportionately to the other joints, cases of rheumatoid disease associated with or resulting from certain specific diseases, and cases of serious visceral complication are much less favorably influenced by these remedies than are cases of acute rheumatism.

While it is exceedingly difficult to determine positively how much influence over the production of cardiac complications in rheumatism is exerted by the salicyl compounds, Dr. Bristowe credits them with very considerable influence in this direction.

He holds that these agents are not simply repressive of symptoms, but veritably curative of the disease, and believes that the tendency to relapse, which some have asserted to be more noticeable with this than with other treatments, is, in many cases, due to the too early discontinuance of the drug.

He has never seen any really alarming consequences nor any permanent mischief follow the administration of salicylates in large doses for the cure of rheumatism, nor does he believe that any special debility is caused thereby.

He regards rheumatism as "a disease of a malarious nature, dependent on the introduction into the body, and on the breeding therein, of living organisms." The most probable theory as to the action of the salicyl compounds, according to his opinion, is that they act directly upon these organisms, though it is probable that they simply destroy or render inert a poison which is elaborated in the system by them.

In the same discussion Dr. W. R. Thomas, of Sheffield, took part by reading a paper. While he recognized the value of salicylic compound in the treatment, he was not prepared to so fully discard other methods of treatment as Dr. Bristowe had done.

He does not believe that we have "one grand remedy" for this disease. He has seen the bicarbonate of potash act like a charm, as also the nitrate of potash. He divides cases of rheumatism into three groups: 1. the sthenic; 2, the asthenic; 3, those in which the rheumatism is caused and preceded by other diseases, as gonorrhea, scarlatina, etc. In the first he finds salicylic acid and the salicylates almost uniformly successful, but by no means so constantly in the others.

Dr. Prosser James gave an account of his own personal experience of rheumatism, for which, in different attacks, he had had different modes of treatment thoroughly tried. In his case the superiority of the salicyl treatment was very decided. To obtain its good effect a mild degree of salicylic intoxication had to be kept up for some days. This could not be distinguished by sensation from cinchonism.

Dr. Pavy, of London, was a strong advocate of the use of the salicylates. His plan was to administer twenty grains every two hours for twenty-four, thirty-six or forty-eight hours, until the pain is relieved, the temperature lowered and the patient is made more comfortable. The interval between the doses is then increased to three and later to four and then six hours. In severe cases he insists upon the continuance of the remedy for at least twelve or fourteen days. He had concluded that this treatment suppresses the symptoms and that time is necessary for removing or eradicating that which gives rise to them. Hence, the necessity for the continuance of the remedy and for keeping the patient in bed upon a diet of milk and farinaceous substances for several days in spite of the protests of the patient that he feels well enough to be up and about.

Leprosy in Baltimore.—A case of this disease is said to have been found in the person of a Chinese laundryman in Baltimore who went to New York as soon as he learned the doctor's suspicions, so that as yet the diagnosis is not absolutely certain.

BOOK REVIEWS AND NOTICES.

The Curability and Treatment of Pulmonary Phthisis. By S. Jaccoud. Translated by Montagu Lubbock, M. D. *New York: D. Appleton & Co.* 1885. 8vo.; pp. 407; cloth. (St. Louis Stationery & Book Co., J. H. Chambers & Co.)

This book consists of the substance of a series of lectures delivered by the eminent French physician in the winter of '80 and '81, and contains the observations and results noticed by him during the long course of his professional life.

The recognized position held by Prof. Jaccoud as one of the best authorities on pulmonary phthisis, and the vast experience he has had in the study and treatment of the disease, demands for his views the most respectful consideration.

With respect to the pathology of pulmonary phthisis, M. Jaccoud holds that the different products, the so-called pneumonic infiltration and the tubercular granulations have, from an anatomical and microscopical point of view, the same structures, although clinically he admits two distinct varieties of the disease—the caseous and the tubercular.

Believing all varieties of phthisis to be of a tubercular nature, he would consider the broncho-pneumonic or caseous form to be tubercle in a benign form, having its own causes, mode of invasion and evolution, and having special prognostic character remarkable for its unusually serious nature in the early stages of the disease, but relatively favorable when the disease is more advanced.

He believes that all forms of tubercle are, from the first, liable and destined to one of two forms of transformation—either that of caseous softening or fibrous evolution, and that the ultimate destiny of the neoplasm depends directly upon the preponderance of the one or the other condition—the more marked the tendency towards fibrous evolution, the greater is the tendency to a cure of the lesion.

M. Jaccoud considers all forms of the disease to be the result of imperfect nutrition, embracing under this name all those processes whose functional activity conduces towards a healthy nutrition of the body. He marks different forms of the disease under the names, hereditary phthisis, innate phthisis, acquired phthisis, scrofulous phthisis, arthritic phthisis, diabetic phthisis, herpetic phthisis. Innate phthisis is the name given to the phthisis observed in the descendants of those who, though not tubercular, are weakened by scrofula, diabetes, alcoholism, by bad hygienic conditions, or by consanguineous marriages.

With these views of the etiology and pathology of pulmonary phthisis and tuberculosis, he writes at length and in detail on the possibilities of a cure of the disease, and takes a much more hopeful view than is usual in the profession. Considering the pneumonic or caseous phthisis as a modified tubercular phthisis, and having met with a number of partial or complete recoveries in this form, he reasons that there is hope of a complete or partial cure in all forms and at all stages of the disease. Of all the forms of phthisis M. Jaccoud considers acquired phthisis as the most favorable to cure; then follow arthritic and herpetic phthisis, innate phthisis, hereditary phthisis and miliary tuberculosis—the two latter give the patient a gloomy prognosis, although a case of cured miliary tuberculosis is cited. The author supports his view by reference to four similar cases recorded by Lebert. The difficulty of a differential diagnosis between acute miliary tuberculosis and typhus fever with bronchitis, will make the reader doubtful of the conclusions.

With these views of the etiology and pathology of pulmonary disease, M. Jaccoud maps out a systematic course of treatment which he insists upon being carried out in all its details. Great stress is laid upon a proper climate, and he favors strongly the higher altitudes. In this he emphasizes the individuality of the patient and specifies conditions in which high altitudes are positively contraindicated. As the author has devoted a good deal of time to the study of the different climates and health resorts of Europe by personal visits, his experiences and views will be especially valuable and reliable.

The hygienic and medicinal treatment of phthisis are fully considered, and he devotes an extended space to the treatment by mineral waters. After a careful study of this work the reader will

probably think that he has taken a rather too despondent view of his cases of phthisis, and perhaps may catch the enthusiasm of the writer. Unfortunately, however, financial and domestic reasons will too often interfere with the systematic treatment demanded by the author.

To those who wish a full and detailed statement of the probabilities and possibilities of cure in consumption, this work can be heartily recommended. It is the product of a thinking mind and result of great experience. It is certainly one of the best works on the subject. W. C. G.

Therapeutics of the Respiratory Passages. By Prosser James, M. D. *New York: Wm. Wood & Co.* 8vo.: pp. 316; cloth. (St. Louis Stationery & Book Co., J. H. Chambers & Co.)

Although the title of this book would limit its scope to the respiratory passages, still it considers a large portion of the most valuable drugs of the pharmacopeia. The effects of experimental physiology, including many of the latest, are fully detailed, and the author has subjected them to the criticism of clinical experience.

The great experience of the author enables him to do this to great advantage, and his conclusions will be of advantage to all who would pursue the practice of medicine from a rational rather than from an empirical standpoint.

It can be commended to both advanced students and practitioners. W. C. G.

Index-Catalogue to the Library of the Surgeon-General's Office, United States Army. Vol. VI. Heastie-Insfeldt. *Washington: Government Printing Office.* 1885. Quarto; pp. 1051; cloth.

This sixth volume of the Index-Catalogue continues the invaluable work of which we have already noticed the first five volumes. It is impossible to over estimate the value of this catalogue. In this volume the titles to which most space is given are "Insane," with seventy-three pages, "Insanity," with eighty-three pages, "Hernia," with eighty-six pages, and "Hygiene," with one hundred and sixteen pages.

Each new volume that is published makes us feel more and more the want of the succeeding ones. It is to be hoped that Congress will make such appropriations as to allow the work to be pushed on to completion as rapidly as is possible.

The Diaphragm and its Functions. By J. M. W. Kitchen, M. D. *Albany: The Voice.* 1885. 8vo.; pp. 101; cloth, $1.00.

The author has filled 100 pages on a subject which usually attracts little attention. The anatomy and physiology of the diaphragm are freely detailed, and the latter part of the work is devoted to what is called the hygiene of the diaphragm. The author gives here some useful advice and enlarges on the evils resulting from the prevalent waist-constriction of women.

W. C. G.

Students' Manual of Diseases of the Nose and Throat. By John W. Kitchen, M. D. *New York: G. P. Putnam's Sons.*

As the author states in his preface, "there is no royal road to medical knowledge," but so-called student manuals do not render the road easier. The present work is issued as "a book of quick reference for the student and over-worked practitioner." It gives a superficial and general résumé of the present state of knowledge of diseases of the throat, and will be satisfactory to those seeking a book of this character.

BOOKS AND PAMPHLETS RECEIVED.

Rivers and Harbors. C. R. Breckinridge, of Arkansas. Washington, Feb. 3, 1885.——Announcements of St. Louis College of Pharmacy. Twentieth Session.——Memphis Hospital Medical College.——New York Post-Graduate Medical School and Hospital: Fourth Year.——Fort Wayne College of Medicine: Seventh Year.——Medical Department of Arkansas Industrial University; Seventh Year.——Medical College of Virginia; Forty-eighth Session.——University of Kansas City. Medical Department: Fifth Session.——Bellevue Hospital Medical College: Twenty-fifth Session.——Forty-Fourth Annual Announcement of St. Louis Medical College, '85-86.——Cooper Medical College, San Francisco, Session of 1885.——Shadows in the Ethics of the International Medical Congress. By Levi Cooper Lane.——Hydrated Tumors in the Brain. By R. Harvey Reed, M. D., Dayton, O. (Reprint from Journal of Am. Med. Assoc., July 4, '85.——Proceedings of Illinois State Board of Health. Chicago, July, 2, 3, '85.——Proceedings of Tennessee State Board of Health, Nashville, July 7, '85.——Students' Songs. Published by Moses King, Cambridge, Mass.——Transactions of Louisiana State Medical Society, Seventh Annual Session, 1885.——Voice in Singers. By Carl H. Von Klein; 8vo., pp. 8; paper: 25 cents.——Inebriism By T. L. Wright, M. D., Bellefontaine, O. Published and for sale by the author. 12mo; pp. 222; cloth; $1.25.——Elements of Modern Medicine: Including

Principles of Pathology and Therapeutics, etc. By R. French Stone, M. D. New York: D. Appleton & Company, 1885. 16 mo.: pp. 370; morocco, with flap.——Fifth Biennial Report of the Board of Managers of State Lunatic Asylum No. 2 to the XXXIII General Assembly.——An Address on Cholera Infantum. By Wm. Perry Watson, A. M., M. D., Jersey City, N. J. (Reprint from Archives of Pediatrics, Aug. 1885.) General Grant.——Apropos of the Threatened Invasion of Cholera.——Dangerous Physicians.——Ferran and his Inoculations.——A Melancholic Attempt to Commit Suicide While Under the Influence of Cocaine.——Editorials from Alienist and Neurologist. By C. H. Hughes.——Annual Announcement of the Department of Medicine and Surgery of the University of Michigan for 1885-86.——Case of Poisoning from Chloroform Taken Internally. By Llewellyn Eliot, M. D., etc. Reprint from Med. Record, July 11, '85.——On Certain Vaso-Motor Disturbances of the Nasal Membrane. By W. C. Glasgow, M. D., St. Louis. Reprint from New York Med. Jour., Aug. 8.

Dr. Wm. K. Bowling, long a leading practitioner and teacher of medicine in Nashville, Ky., the founder, and for twenty-five years the editor, of the *Nashville Journal of Medicine and Surgery*, died at Mount Eagle, Ky., Aug. 6, '85, at the age of 77 years.

How to Make Gruel.—To make flour gruel properly you use one quart of milk, three tablepoonfuls of flour, and a teaspoonful of salt. Pour all the milk except a cupful into a double boiler. Mix the flour with the milk you reserved, and stir it into the boiling milk and let it cook thirty minutes, putting in the salt ten minutes before it is done. The longer milk cooks the more laxative it is. If you wish to make the gruel especially nutritious cook a half cupful of raisins cut in two in the milk during the entire time. This drink is very stimulating, and is often given in place of wine to patients. In Indian-meal gruel the meal must always be well cooked, an hour or two being usually required. But it is better to use the very fine meal now in use rather than that milled by the old process, and always, when needed quickly, put it into boiling water at once.

To make this gruel take one quart of boiling water, two tablespoonfuls of flour, one teaspoonful of salt; mix the meal, etc., with a half cup of cold water, and pour into the boiler.

Stir while it is cooking and cook not less than thirty minutes. Always keep the saucepan covered."—*Miss Parloa's Lectures before the School for Nurses at Charity Hospital, Blackwell's Island, N. Y.—Gaillard's Journal*, August, 1885.

REPORTS ON PROGRESS.

OTOLOGY.

Reported by Dr. M. D. Jones, St. Louis.

Peroxide of Hydrogen.—Dr. Dayton, Surgeon to the Harlem Dispensary, finds this remedy excellent in chronic suppurations of the middle ear of consumptives, by internal administration and local application.

In ozena and laryngitis, associated with tubercular diathesis, sprays of the peroxide have proved valuable. These not only destroy pus, cell life, etc., but act as a local anesthetic. The irritation caused in the fauces, by even a two per cent. dilution, when taken internally, can be obviated by administering in milk. The writer recites how certain affections of the ear, nose and throat occurring in tubercular subjects, which proved intractable to the most approved methods of spraying, etc., yielded to the use of the peroxide. Two cases are given.

——Æt. 24, family history of phthisis pulmonalis. Owing to extreme debility had to give up business as agent of insurance company. A number of physicians examined the patient and pronounced it a case of advanced phthisis.

Nov. 7, 1884, he came under observation for "nasal catarrh and buzzing in the ears," stating that prior treatment at hands of specialists and at clinics had been unavailing. Examination showed much thickening of the mucous membrane over middle and inferior turbinated bones; swelling of faucial orifices of Eustachian tubes; vegetations in the pharyngeal vault; both Mts sunken, and light spots faint; "C" tuning fork heard twice as loud by bony as by aërial conduction; with watch, H. D. R. = $\frac{4}{40}$; H. D. L. $\frac{1}{40}$. Preparations were made to use the spray, when patient flatly declined "any more of that business," saying it did no good.

Six ounces of a two per cent. solution of the peroxide, taken in half ounce doses three times daily, were ordered, and weak solution of salted water to be snuffed up the nose. At end of nine days patient came back with improved appetite, bowels were regular, sleep more refreshing and expectoration much lessened. Vegetations in vault of pharynx were scraped out with curette, and mixture of ergotin, Monsel's solution and glycerine applied. One week later removed with Jarvis' snare some masses from nose which established free nasal respiration.

Patient was seen twice a week until Jan. 3, 1885, and during this time was taking the peroxide regularly three times a day, with a two per cent. solution used as a spray in naso-pharynx. When discharged his condition was very good. Had gained fifteen pounds in weight; cough less troublesome; naso-pharynx in good condition; tinnitus aurium gone and H. D. R. $= \frac{15}{40}$ and H. D. L. $= \frac{6}{40}$ by watch.

Case II. Mrs. W. æt., 32, eight and a half months pregnant, family history bad. Patient was pronounced by a fellow practitioner to be "full of tubercular disease." Came under treatment Jan. 12, 1885. For two days and nights had been suffering from acute inflammation of middle ear, for which "everything but leeches and hot water had been used," without avail.

While making otoscopic examination the pain was so great that she "felt as if her child was being born through her ear." Drum head was distended from effusion in middle ear. Instillations of cocaine were made in the ear, and then paracentesis of the membrane performed with free escape of pus. After gentle inflation of middle ear through a catheter, a twelve per cent solution of the peroxide was poured in ear. This pouring in and wiping out was repeated until the membrane was well cleaned.

During the following week, gentle inflations were practised with instillations of an eight per cent. solution of the peroxide, and a two per cent. solution of the same was given in half-ounce doses internally. On the eighth day the drum-head had healed. At the expected time the patient gave birth to a healthy child, with breast milk "richer and more abundant than ever before."

The clinical histories here given are not calculated to excite enthusiasm over the peroxide of hydrogen, and we await further news from Dr. Dayton.—*New York Med. Journal*, April 25, 1885.

Deafness Relieved by Pilocarpine.—Two cases of sudden and extreme loss of hearing, bilateral, from disease of nervous structure of the ear, improved by hypodermic use of pilocarpine, are reported by Dr. Barr of Glasgow.

Case I. Shipwright, æt. 22, intemperate, of phthisical family. Six months before admission to hospital, Aug. 25, 1884, had contracted syphilis followed by secondary symptoms. Six weeks before coming under observation, while crossing the Atlantic, he was seized with extreme nausea, vomiting and giddiness. By the time his ship reached port, only slight giddiness remained. On going ashore, the day being hot, the giddiness was so great that he staggered and fell to the ground without losing consciousness.

On following morning he noticed his left ear was deaf, and felt a noise, like the rushing of water, through the head and that ear. Toward night the hearing in the right ear grew bad, and by following morning was totally deaf.

During voyage back to England, he lay in bed most of the time in a state of nausea, giddiness, and in walking would reel like a drunken man. Complained of severe pain in back of head and behind the ears. Cantharidal blisters behind the ears, and a mixture containing potassium iodide brought some relief to the head trouble. Facial paralysis of right side appeared at this time and remained twenty-four hours.

Examination of outer and middle ears gave negative results. When spoken to loudly, voice could be heard in right ear, but words not distinguished. Tuning fork not heard by aërial or bony conduction. Eustachian tubes healthy. Tongue coated, breath fetid and bowels costive. One third of a grain of pilocarpine was now injected under the skin over the shoulder every second day for six days, and then every third day for nine days. Copious diaphoresis followed each injection. Improvement in hearing followed promptly, and in three weeks he could hear with the right ear by elevating the voice above ordinary speech. Nine months after his attack H. D. R. W. = $\frac{8}{40}$ — H. D. L. W. = 0. Tuning fork applied to centre of forehead heard better in right ear.

Case II. A laborer, æt. 54, admitted Feb. 20, 1885. Family history good, general condition bad. Two weeks before admission, while stooping at work became suddenly deaf, with sensation as if a pistol had been discharged in head.

This was succeeded by severe pain in head, especially the vertex,

and some giddiness; and by a feeling in right ear as if "a clock was working inside." Bony conduction by tuning fork faint. The voice could not be heard, though loudly spoken, in right ear; heard faintly in the left. A small calcareous patch on each membrane behind handle of malleus. Pilocarpine gr. one-twelfth was now used, hypodermically daily, but after three or four injections the dose was raised to one-third of a grain, every third day. In all eight injections were used.

Improvement in hearing began after second dose, and was steady and gradual. Two months from the time of the seizure his condition was as follows: H. D. R. W. $= \frac{8}{40}$, H. D. L. W. $= \frac{1}{40}$. Conversation in ordinary tone of voice was heard without difficulty. Subjective noises absent.

It is impossible to say in these cases at what part the auditory nerve was attacked, whether at its origin in the brain, in its stem, or in the terminal filaments. In the first case, due to syphilis, the trouble appeared to be intracranial, as shown by the severe pain in back of head, the vertigo, reeling in walking and temporary facial paralysis. In the second case, the lesion was labyrinthine and apoplectiform, of the nature of a rupture of a blood vessel, caused by the stooping position, and his enfeebled state of health. The absence of great vertigo would suggest that the lesion was more in cochlea than in semi-circular canals. Pilocarpine seems to have special power of stimulating the absorbents, and so removing effused products. It appears to have special action on the intra-cranial absorbents, and hence it would be well to employ it more generally in cases of cerebral apoplexy.—*British Med. Jour.*, June 18, 1885.

Case of Fracture of Base of Skull, with Loss of Brain Substance through Ear.—Nov. 30, 1883, a well developed man, aged 38, was brought into the hospital in a semi-unconscious condition, and unable to give an account of his injury. After repeated questioning he would reply and then relapse into stupor. There was a slow but continuous flow of blood from the left ear. Lodged in the concha and in the auditory canal, and on the pillow, were small masses of brain substance. Respirations were 20. Temperature 99½° F., and pulse 80. Pupils were active. In evening of same day, his condition was unchanged, except the discharge from ear was now a serous fluid, slightly tinged, and was very copious. Urine passed in bed. Bowels not evacuated.

Dec. 1st. Pulse 80, temperature 99°, respiration 20. Discharge of fluid from ear same. Bowels moved. Partook of milk and beef essence. In evening became restless, and chloral and bromide potash administered.

Dec. 2d. Pulse, respiration and temperature unchanged. Breathed quietly through the nose unless disturbed, when the breathing became of stertorous character. Facial paralysis of left side of face noticed. Fluid from ear unchanged in quality or quantity.

Dec. 3d. More rational and recognized his wife. Tongue not deviated when protruded. Complained of headache. Chloral and potash discontinued and, given one grain calomel every three hours.

Dec. 5th. Discharge from ear very slight and watery.

Dec. 6th. Passed a restless night, being delirious at times. Chloral given.

On the 7th. No discharge from ear, and began steadily improving. Three days later the facial paralysis had disappeared, and purulent offensive discharge from the ear had set in. On examination the ear showed the superior wall of the canal pushed down to such an extent as to nearly close the canal, and a fissure of the Mt. extending "from the upper part down to the umba." For several months after his discharge, he experienced severe vertigo, and his intellectual faculties were weak. The writer believes there was a fracture "probably implicating the anterior surface of the petrous portion of the temporal bone, somewhere between the eminence for the superior semi-circular canal, and the line of union of the squamous and petrous portions."—*Med. News*, June 6, 1885.

MEDICINE.

Treatment of Acute Diarrhea.—J. K. Spender recommends in cases of sudden and acute diarrhea a formula which was published in March, 1875, in the *Practitioner* by Dr. D. Young, of Florence. Two minims of castor oil with three or four minims of solution of hydrochlorate of morphia (Brit. Phar.) rubbed into an emulsion with gum acaciæ. To this were added spirits of chloroform and a little syrup. These were the quantities for a single dose, to be repeated every hour or two, according to circumstances.—*Brit. Med. Jour.*, Aug. 8, '85.

Syzygium Jambolanum in Diabetes Mellitus.—Dr. C. E. Clacius states that his attention was called by a diabetic patient to the marked improvement in his condition caused by the use of this new drug with which he had experimented on his own responsibility. The total disappearance of the sugar, reduction in quantity of urine, and relief from other distressing symptoms, was so decided that he tried the drug on other patients, similarly affected, with very favorable results.

While the observations so far made are by no means conclusive, they certainly warrant further experiments with this drug. The seeds or fruit-stones contain the active principles of the plant.—*Chic. Med. Jour. and Ex.*, Aug., '85.

Laxative Pills.

℞ Pulv. rhei.
Pulv. aloes socot., aa 0.75.
Ext. belladonnæ.
Ext. nucis vomicæ.
Podophylli, aa. 0.15.
Essence de girofle, gtt. v.

M. Ft. pill no. xij. Sig. One morning and evening.—*L'Union Méd.*, Aug. 22.

Ipecac in Dysentery.—According to the editors of the *Therapeutic Gazette*, the only remedies which they have found satisfactory in the treatment of dysentery are calomel and ipecacuanha, the latter being much more universal in its application.

The distressing vomiting which the ipecacuanha is so apt to provoke may generally be avoided and the desired result attained by giving the ipecacuanha in doses of five grains every half hour in pill form in combination with opium, or, better, by preceding each pill fifteen minutes by a dose of opium. In bad cases, with pronounced so-called bilious symptoms—excessively coated tongue, epigastric tenderness or sense of weight, sick stomach and vomiting—it is probably preferable to begin the treatment by giving the five grain pills every fifteen minutes until free vomiting is set up.

Sulphuric Acid in Diarrhœa.—Dr. H. C. Wood, writing editorially in the *Therapeutic Gazette*, says that the value of sulphuric acid in treatment of diarrheas of relaxation is too little appreciated, especially in combination with the extract of hematoxylon.

The following formula, varied to suit individual cases, especially in the quantity of opium, is agreeable and very effective:

℞. Acid sulphur. arom., - - - fʒiij.
Ext. hematoxyli, - - - ʒiij.
Tr. cinnam.,
Tr. opii. camph., aa., - - - fʒiss.
Syr. q. s. ad - - - - fʒvj. M.
Sig. Tablespoonful as required in a little water.

Carbolic Acid in Diarrheas.—In non-inflammatory diarrhea, especially in cases of lientery, with which there is such excessive nervous irritability of the bowels that food when taken passes right through, carbolic acid, or, better, creasote, is a most valuable remedy. It is also often very serviceable in summer diarrheas. A very valuable combination, especially useful in sudden violent attacks, is found in the following formula:

℞. Chloroform, - - - f. ʒss.
Ol. caryophylli,
Creasoti, - - - aa. f. ʒi.
Tr. opii, - - - f. ʒss. M.
Sig. Shake well. Dose 20 to 30 drops.

It may be administered every half hour at first. Of course care must be taken not to repeat the maximum dose too frequently.

Syrup of Hydriodic Acid in Acute Inflammatory Rheumatism.—Dr. James Craig finds that the syrup of hydriodic acid in doses of two or three tablespoonfuls in a wine-glassful of water every two hours, lessening the dose as improvement takes place, has given most satisfactory results in the treatment of acute inflammatory rheumatism. In subacute rheumatism also it has given good results, but in chronic cases seems to be entirely ineffectual.—*N. Y. Med. Jour.*, Aug. 8.

Oleate of Manganese.—Dr. F. H. Martin, who has experimented largely with manganese, first brought to the attention of the profession by Ringer and Murrell in 1883, has found it valuable not only in amenorrhea for which they recommended it, but also for menorrhagia and metrorrhagia when dependent upon an atonic condition of the uterus. The difficulty of administering this drug has interfered with its ready acceptance by the profession. Dr. Mar-

tin has recently experimented with an oleate of manganese dissolved in oleic acid. This is used by rubbing one-half dram to one dram of a twenty per cent. solution upon the patient's abdomen, and promoting its absorption by vigorous friction with the hand until the oil has entirely disappeared. If from undue sensitiveness or other cause the application cannot be made upon the abdomen, it may be made upon the inside of the thighs or upon the back. Dr. Martin has, as yet, used the new remedy in only a very limited number of cases, but is much pleased with the result obtained.—*Chic. Med. Jour. and Ex.*, Sept., 1885.

Bryonia Alba.—Dr. C. S. Lombard thinks the value of bryonia alba has been too little recognized by regular practitioners. He says that it has a special action on and affinity for serous membranes. When a patient has a "cold involving the lungs," he would administer three or four minims largely diluted every three hours. The same he finds efficacious in treating bronchitis of the larger tubes, especially if the cough be dry and tight, and the patient complains of sharp stitches in the upper part of the chest. In pleurisy he gives one or two drops hourly; and in the bronchial cough of old people two or three minims every two to four hours he says will commonly relieve the symptoms.—*Chic. Med. Jour. and Ex.*, Sept., 1885.

Atropine for Acute Coryza.—Dr. S. Solis Cohen recommends the administration of atropine early in the course of an acute coryza, and asserts that in nine cases out of ten it will prove truly abortive. It may be given in granules, or triturates of $\frac{1}{100}$ or $\frac{1}{120}$ gr. or in solution, one grain to the ounce of distilled water, of which four minims equals $\frac{1}{120}$ gr. He prefers the latter with patients upon whose discretion he can fully rely, and to whom he would be willing to intrust a prescription for a poisonous drug. With others he would give three or four triturates or granules of the dose desired, with explicit written directions, one dose being administered at once and repeated in four hours, provided there be no dryness of the throat, further repetition being controlled by the same provision.

When seen during the first twenty-four hours two doses will often produce such effect that the patient needs no further medication. Secretion of thick yellowish mucus, requiring the use of a handkerchief, will, however, usually persist for about a week, but there is ordinarily no embarrassment to breathing.

Sometimes, he says, it is necessary to repeat the dosage the next day in the same manner, on account of a renewal of the watery discharge, suffusion of the eye and more or less stuffiness of the nose. The full therapeutic effect in severe cases is not obtained until the physiological effect, dryness of the throat and dilatation of the pupil is produced. One patient of Dr. Solis Cohen's complained that the dryness of the throat was worse than the disease.

Immediate relief to the distressing nasal symptoms may be obtained by instilling a solution of cocaine, but this must be frequent ly repeated.

Where cases come under observation too late to use the atropine treatment with advantage, he has found good results sometimes from the administration of ten or fifteen grain doses of salicylate of ammonium every second hour till *tinnitus aurium* is produced.—*Phila. Med. Times*, Aug. 8, 1885.

Salicylic Acid in the Intestinal Catarrh of Infancy.—Wm. A. Northridge recommends salicylic acid as a remedy for diarrheas of infants and young children, whether due to teething, improper food, or the action of heat upon the sympathetic nervous system. He regards it as safe, and says it is well borne by children. The formula used at the Seaside Home for Children, on Coney Island, is the following:

℞ Acidi salicylici, - - - - - grs. iij.
Cretæ preparatæ, - - - - - grs. ij.
Syr. simplicis, - - - - - ʒj. M.

This at a dose to a child of six months or more every two hours. Of course the administration of this medicine does not obviate the necessity for observation of strict hygienic measures at the same time.

In twenty-four hours, generally, there is marked improvement. There is usually a gradual, not a sudden, cessation of the diarrhea. —*N. Y. Med. Jour.*, Aug. 29, 1885.

Morphine Poisoning in a Child, aged Fifty Hours.—Dr. Wm. Judkins reports a case of recovery from morphine poisoning in a child but fifty hours old, to whom, by mistake, had been given two doses of one-eighth grain each of sulphate of morphia. Immersions in hot water, whisky hypodermically, strong black coffee by the mouth and by the rectum were the means used for recovery.—*Med. Record*, Aug. 8, '85.

Cough Mixtures for Children.—The hospital formulary of the Department of Public Charities and Correction of New York City contains the following formulæ of cough mixtures for children:

℞. Tr. opii camph.,
Spts. ammon. arom., - - - aa ℥i.
Ext. ipecac fl., - - - - ℥ss.
Syr. prun. virg., - - - - ℥j.
Aquæ., - - - - q. s. ad ℥iij. M.
Sig. A teaspoonful.

Mistura Ammonii Carbonatis.

℞. Ammonii carbonat., - - - ℥ss.
Syr. senegæ, - - - - ℥iv.
Syr. ipecac, - - - - ℥ij.
Syr. tolutan, - - - - ℥v.
Ext. glycyrrhizæ, - - - - ℥i.
Aquæ cinnam. q. s. ad, - - - ℥iv. M.
Sig. Dose: a teaspoonful for children.

Mistura Ammonii Chloridi.—

℞. Ammonii chloridi, - - - - ℥ss.
Potassii chloratis, - - - grs. xl.
Syr. senegæ, - - - - ℥iv.
Syr. ipecac, - - - - ℥iij.
Syr. tolutan, - - - - ℥v.
Ext. glycyrrhizæ, - - - ℥i.
Aquæ cinnam. q. s. ad, - - ℥iv. M.
Sig. Dose: a teaspoonful for children.

—*Druggists' Circular.*

OBSTETRICS AND GYNECOLOGY.

Quadruple Pregnancy.—Dr. M. Arthur reports delivering a woman of quadruplets, two boys and two girls, the boys weighing five and one-half pounds each, the girls five and one-quarter pounds each. The parents were Scotch, and had five children before these. The mother is about thirty-five years old.—*Jour. of Am. Med. Ass'n* Aug. 8, '85.

Remarkably Large Ovarian Cyst.—Dr. Howard Kelly re-

ports the successful removal of an ovarian cyst weighing one hundred and sixteen pounds from a woman aged forty-two years. This is one of the largest tumors ever removed, with recovery of the patient. Spencer Wells removed a tumor weighing one hundred and twenty-five pounds, and that was the only one in his list of one thousand ovariotomies which weighed over one hundred pounds.—*Am. Jour. of Obstet.*, Aug. '85.

Two Ovariotomies on the Same Patient.—Dr. Jos. Ransohoff reported to the surgical section of the American Medical Association a case in which the operation of ovariotomy had been twice successfully performed upon the same patient, once at Koenigsburg, Prussia, and once by himself in Cincinnati, O. In the last operation very extensive adhesions were found, and it became impracticable to remove all the tumor. Therefore a portion of the cyst was sewed into the abdominal wound. Dr. Ransohoff suggests the name, ventro-cystorrhaphy for this procedure.

Deodorized Iodoform.—Dr. E. P. Stout says that, in order to make a deodorized powder, the iodoform as well as the chemical used to deodorize must be very finely powdered, and thoroughly incorporated together, and must stand for a month or more in a glass stoppered bottle.

Either of the following he has found to be satisfactory:

℞	Iodoform, - - - - - -	parts 9	
	Coumarin, - - - - - -	part 1.	M.
℞	Iodoform, - - - - - -	parts 9	
	Vanillin, - - - - - -	part 1.	M.
℞	Iodoform, - - - - - -	parts 9	
	Acid cinnamic, - - - - -	part 1.	M.

Coumarin is the odorous principle of tonka bean. The artificial chemicals he finds quite as efficient and as available every way as those which exist naturally, and they are very much less expensive. —*Therap. Gazette*, Aug. 1885.

The Medical Chronicle has been consolidated with the *Philadelphia Medical Times*. Dr. Rohé, the editor of the *Chronicle*, will be associated with Dr. Frank Woodbury in the management of the *Times*. After the completion of the current volume the word "Philadalphia" will be dropped from the name of that journal.

SOCIETY PROCEEDINGS.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.

This society of specialists held its Ninth Annual Meeting at the Indian Harbor Hotel, Greenwich, Conn., Aug. 26, 27 and 28, 1885. The meeting was called to order at ten o'clock, by President, Dr. W. A. Hardaway, of St. Louis. Dr. J. E. Graham, of Toronto, Canada, read the first paper, describing "A Case of Tuberculo-Ulcerative Syphilide of Hereditary Origin." A girl twenty years of age had on the right arm from the wrist to the elbow very little healthy skin, little but cicatricial tissue. There were elevations and depressions, and some places were covered with thin scales. The hand was not involved and the affection did not extend deeper than the subcutaneous areolar tissue. The arm was atrophied and covered with cicatricial tissue, three or four inches above the elbow. At the upper border of the cicatricial tissue an ulcer three-fourths of an inch wide encircled the arm. Above this there was sound tissue with no nodules. About the middle of the left clavicle was a swelling, and ulceration about the size of a silver dollar, caused by a blow. There was no copper-colored appearance. The heart and lungs were healthy, and the urine normal. The mother was apparently healthy, and the patient's three sisters, all younger than herself, were healthy. The father died of pneumonia when the patient was eighteen months old; it was learned (after the patient had been under treatment for some time) that he had also had syphilitic ulceration of the throat. Local applications of a mild mercurial ointment were made, and corrosive sublimate and iodide of potassium were administered. In the course of six or eight weeks the ulceration had healed.

The speaker referred to the difficulties of diagnosis in this case, there being at first no specific history, the facts in regard to the father not being learned for some time after the case had been un-

der treatment, and there had been no previous evidence of hereditary syphilis; but, in view of all the facts, he thought that his diagnosis could not be questioned.

Dr. R. W. Taylor, of New York, called attention to some points in the family history. The mother was healthy, but the father had syphilis. He believed he was the first in the country to call attention to the fact, now generally conceded, that syphilis can be communicated to the child without infection of the mother. He has seen this a number of times, and in cases in which a most careful and thorough examination of the mother had been made and continued for a series of years. The failure to obtain a history of early manifestations of hereditary syphilis is not uncommon, but Dr. Taylor believes there is usually some indication of specific taint, though so slight as not to excite notice. These may pass away, and in six months or a year ulcerative lesions appear, although it is not uncommon for the child to attain the age of six to eighteen years without such manifestation. He has reported the case of a girl whose mother had syphilis, who had exhibited no signs of hereditary disease until fifteen years of age, when she had, following a cold bath, ulcerative gummatous tumors scattered over the entire body. Traumatism has some importance in the time of appearance of these lesions, as he has frequently noticed.

Dr. C. Heitzmann, of New York, thought such cases not uncommon. He had seen such cases, in which he was unable to determine at first the nature of the affection, or to make the diagnosis between syphilis and scrofula. Lately a man, aged twenty, came to him with a condition affecting the right groin, similar to that described by Dr. Graham, with an ulcer ten inches in diameter.

Dr. Greenough, of Boston, referred to the point regarding heredity to which Dr. Taylor had called attention, viz., the possibility of the father's infecting his progeny, without the mother showing any signs of syphilis. Within the past two months he had seen a woman who had lost three children in succession from hereditary syphilis, while she was strong and apparently perfectly healthy, and had never shown any signs of the disease. This woman had been under competent medical observation for six or seven years.

Drs. J. C. White, of Boston, and *L. A. Duhring*, of Philadelphia, said that in certain cases it was almost impossible to express a positive diagnosis at first. The latter thought the result of treatment in causing a rapid cure in the case described would certainly

incline him to the opinion that this was a case of syphilitic disease. He had, however, never seen a case recover so quickly.

Dr. J. Nevins Hyde, of Chicago, was convinced that occasionally syphilitic children are born where no evidence of syphilis in the mother can be detected. As far as general health was concerned, he could not say that he had seen vigorous, healthy women the mothers of syphilitic children. Such mothers are usually pallid and weak, although with no symptoms which could be ascribed to syphilis. He had never seen inherited syphilis manifest itself in advanced years, or else he had failed to make the proper diagnosis.

Tardy inherited syphilis he knows nothing about. He is satisfied in its origin heredity does not amount to very much. The accidental cases of syphilis are very common. He had seen the initial lesion of syphilis on the head of a penis where it was without doubt due to inoculation from the finger of the surgeon in catheterization. He had no doubt that the case described was one of syphilitic trouble, but his experience would not permit him to pronounce syphilis hereditary.

Dr. W. A. Hardaway, of St. Louis, thought it unwise to base our diagnosis on the results of internal treatment. The fact that a case gets well under antisyphilitic treatment is not proof that the affection is syphilitic in its nature. Local treatment alone will often produce that result.

Dr. R. W. Taylor disagreed with Dr. Hyde in the statement that women apparently unsyphilitic, who have borne syphilitic children, are pallid and weak. More frequently he finds such persons in robust health.

Dr. F. B. Greenough, of Boston, read the next paper entitled, "Clinical Notes on Psoriasis." The paper was founded on 396 cases of psoriasis occurring among about 15,000 cases of skin disease, or about two and one half per cent.; 206 of these cases were males and 188 females. A large proportion was first attacked between the ages of ten and forty years; this latter observation is not in accordance with the statements of most authors. In but ninety-seven cases was the writer able to get reliable evidence in regard to the family history; in thirty-one of these psoriasis had existed in a near relative, but in the remaining sixty-six no other member of the family, near or remote, had had the disease. Where there is much development it is almost constantly found about the elbow

and knees, and more frequently on the extensor surfaces than on the flexors. A class of cases is met with in which the skin of the leg below the knee is affected.

Well marked cases are readily recognized, but in some cases there is considerable difficulty in the diagnosis. It is most frequently confounded with some eruption resulting from constitutional syphilis.

Psoriasis affecting the scalp often resembles secondary syphilis. In psoriasis, however, the patch consists simply of epithelial cells, usually on a slightly hyperemic base; in the syphilitic eruption the crust contains other elements than epithelial cells, and on removal of the crust spots of moisture will be detected. A characteristic symptom of psoriasis of the scalp is a band of hyperemia, about three-fourths of an inch wide, around the forehead, contiguous to the hair; this is a point of value in the diagnosis between eczema capitis and psoriasis. In eczema, also, evidence of dried serum or pus will be found. Eczema is apt to extend to the ears. Psoriasis is not accompanied with enlargement of the post-cervical glands, as in eczema. The diagnosis from favus is made by the age of the patient, a moist surface beneath the crust, the evidence of destruction of the hair follicles, and by microscopical examination.

The speaker had never been able to satisfy himself that psoriasis of the scalp ever caused permanent loss of hair. On the general surface, syphilides are most apt to resemble psoriasis. The syphilides are apt to affect the flexor surfaces, while psoriasis more commonly affects the extensor aspects. Psoriasis begins as a minute point of hyperemia, which may last for several days. In macular syphilides a crop of macules appears within twenty-four or forty-eight hours, and then the eruption begins to fade. There is in syphilis a decided pigmentary change. In squamous syphilis, the epithelial scales differ from those of psoriasis. The amount of pruritus complained of in psoriasis varies, but is rarely a prominent symptom, although in exceptional cases it may be severe. He has never seen any eruption on the palms or soles resembling psoriasis, except eczema, which was not syphilitic. There is no specific treatment; what will benefit one case may make another worse. In his experience tarry preparations, especially the oil of cade, had been most efficacious. Great comfort may be afforded by the use of emollients, of which cod-liver oil is one of the best.

Cod-liver oil and oil of cade (equal parts) is a common prescription. Chrysarobin is a powerful remedy, but has the disadvantage of soiling the clothing; moreover, on the face and scalp it is apt to produce violent dermatitis. The internal administration of arsenic in some cases is a benefit. Even after apparent recovery, there is great danger of relapse.

Dr. Greenough replied, in answer to Dr. Hyde, that in none of the cases mentioned was eruption on the palms of the hands observed. Dr. Hyde thought it would be well to drop the idea that psoriasis may occur on the palms of the hands exclusively. In all the cases in which such appeared to be the case, he had been able to make another diagnosis. He had observed one or two cases of psoriasis of the head in individuals bald on the top, and in these instances the eruption confined itself to the portions covered with hair.

Dr. L. A. Duhring remarked that the reader did not allude to the difficulty sometimes experienced in diagnosticating seborrhea capitis from psoriasis. He had found considerable trouble in the diagnosis, particularly in young girls. In these cases the eruption was confined to the scalp.

Dr. A. R. Robinson, of New York, said that there is usually no difficulty in diagnosis of favus and psoriasis. He did not agree with the author in regard to one of his points. In the early stage of favus there is no moisture when the crust is removed; but a shiny appearance, and in advanced stages ulceration.

He agreed that psoriasis always occurs in small spots of hyperemia at first, not covered with scales. He considered it primarily an affection of the rete. While psoriasis often disappears without producing pigmentation, yet there may be discoloration on the lower extremities, particularly with a varicose condition of the veins. In some cases where a few patches of psoriasis are limited to the lower extremities, it is difficult to make the diagnosis; other cases of acute psoriasis closely resemble acute eczema. Whilst we do not see cases of psoriasis limited to the palms of the hands, he was sure that cases have been shown in which the palms of the hands have been affected with other portions of the body.

Dr. A. C. White, of Boston, concurred with Dr. Duhring as to the difficulty of diagnosticating between psoriasis of the scalp and seborrhea. He does not lay much stress on the location of the eruption; when this is sparse, it is more apt to affect the extensor

surfaces. He called attention to a termination which he had seen in three cases, viz., a degeneration into epithelioma.

Dr. R. B. Morison, of Baltimore, said that although in dispensaries he had had many negroes under treatment, he could only recall one or two cases of psoriasis in persons of that race; in such cases there is a loss of pigment.

Dr. G. H. Fox, of New York, said that too much stress is generally laid on the rule that psoriasis occurs most frequently on the extensor surfaces, the knees and the elbows; that in general psoriasis the vicinity of the knee and elbow escapes. In every individual case the better the patient's health the less likely is he to suffer from a recurrence of the affection.

In the treatment of psoriasis, he had followed the teaching of the late Tilbury Fox. In psoriasis, as in other inflammatory affections of the skin, and in lupus, the first thing to do is to lessen the congestion of the skin. He does this not by an alkaline treatment, but by restricting the diet. He is somewhat indifferent as to the starchy and saccharine elements of the food, but cuts off meat, and orders fruits and vegetables in summer, and in winter gives a carefully restricted diet. Tea, coffee, tobacco and stimulants of all kinds are cut off. By so doing, more will be accomplished by using arsenic and local applications at the start. With the application of chrysarobin, made at the proper time, there is no necessity for the use of tar. This drug will do no good if the applications are made when the patches of psoriasis are in a congested condition. If the acute congestion is at first lessened, chrysarobin will produce beneficial results.

Dr. C. Heitzmann, of New York, said that a most important point, after the diagnosis, is to decide as to the acuteness or chronicity of the affection.

If acute, local applications are to be avoided; if chronic, chrysarobin may be used with advantage, at least temporarily; it does not cure. Chrysarobin removes the disease for a time, but in a few months it returns. There is nothing like tar to prevent the recurrence. No mention has been made of pyrogallic acid, which does good in some cases. Some cases cannot be treated successfully with any remedies, growing worse.

Dr. W. A. Hardaway believed that psoriasis is a disease in the skin itself. It is frequently hereditary. The same sort of skin may be transmitted, just as a certain color of the hair or of the

eye may be transmitted, and then any exciting cause may develop the psoriasis. Traumatism is frequently the exciting cause. He had seen psoriasis follow eczema. It is not unlikely that seborrhea of the scalp may lead to the development of psoriasis. Internal causes may produce it. He has seen a case in which, apparently, excessive use of oatmeal had produced typical psoriasis.

In the treatment of psoriasis it is important to regulate the diet. He cuts off meats, and aids digestion in all possible ways. As a local application, he believes chrysarobin with salicylic acid to be very useful in chronic cases. He had employed chrysarobin in liquor gutta-perchæ, and in gelatine paste. This treatment may be followed up by the application of sulphur ointment.

In psoriasis of the scalp, sulphur is quite an efficient remedy. Arsenic is useful.

Dr. Greenough said that he did not intend to cover the entire ground of psoriasis in one paper. The omission of a consideration of seborrhea, he admitted, was an oversight. In regard to pigmentation, he referred especially to those cases of psoriasis of the trunk which were most apt to be confounded with syphilides.

Dr. J. C. White, of Boston, reported "Two Cases of Angioma Pigmentosum et Atrophicum," and from a study of these cases, Dr. White concludes that in the beginning of the development these spots cannot be distinguished from ordinary freckles. Gradually the spots multiply until they involve a considerable portion of the skin. Probably several years may elapse without other manifestations of the disease.

The telangiectasic condition is probably secondary. In the first case it was most developed in the atrophic portion. It is probable that in this case there will be hypertrophy of the epithelium and final transformation into epithelioma. This had been the case in thirty-three cases which have been reported.

At the evening session, Dr. J. Nevins Hyde, of Chicago, read a paper on "The Relations of Lupus Vulgaris to Tuberculosis." He compared the frequency of the disease in this country and in the Vienna Hospitals, and gave details of twenty consecutive cases observed by him in Chicago. There was a remarkable absence of pulmonary tuberculosis, scrofula and allied diseases in their family histories. He noted the teaching of older and recent writers, maintaining, on his own part, that lupus vulgaris is not the result of tuberculosis or other systemic diathesis, but the product of a local

infection by bacilli, entirely unassociated with any constitutional evidence of diathesis or predisposition.

Dr. James C. White, of Boston, then read a paper on "The Treatment of Lupus by Parasiticides." He showed that all previous plans of treatment which had proven most successful were those which would have the effect of destroying the parasite which might be present. A number of cases were then reported in which the local use of corrosive sublimate in the strength of one to two grains to the ounce of water or unguent had been beneficial. The ointment was especially recommended. It had been rarely necessary to prolong treatment over two months.

Dr. Sherwell, of Brooklyn, did not believe in the parasitic nature of the disease, and did not think that the theories of Koch had been entirely proved. It seems to him that lupus and scrofula represent forms of syphilitic hereditary influence.

Dr. Wigglesworth, of Boston, suggested the oleate of mercury as more efficient than ointments, on account of its penetrating power.

Dr. Hyde said that at the last meeting of the Association, Dr. Taylor suggested a solution of corrosive sublimate in tincture of benzoin for ringworm. He had used this in cases of lupus and of infecting chancre.

It makes an excellent application. He denied that scrofula and lupus have any relationship whatever with syphilis.

The next paper was by Dr. W. A. Hardaway, of St. Louis, and was on The Treatment of Port-wine Mark by Electrolysis. He stated that in this affection, the object is to excite sufficient inflammation to cause occlusion of the vessels. Electrolysis seems to be the most convenient way of doing this. At first he had used a bundle of needles, but the reaction was too violent and there was, moreover, a great tendency to keloid development, so that he now employed only a single needle. It is important to allow a period of some weeks to elapse between the operations. The histories of three cases were given, in two of which this method had been employed with marked success, but in the third the result was unsatisfactory.

Dr. White had produced considerable improvement by this method in one case.

Dr. Wigglesworth had seen good results in telangiectases from cutting the vessels in two places and using a preparation of iron, thus closing up the dilated vessels. The worst case of telangiec-

tases that he had ever seen occurred in a middle-aged lady, whose face, in consequence of the disease, was bright red in color. He treated her for three or four years with a marvelously good result.

Dr. Fox thought that better results could be obtained by electrolysis than by other measures, but it did not remove the trouble entirely. He had used the treatment by puncture and with carbolic acid with fair results. In one or two cases he had passed the electrolytic needle deeply into the tissues, endeavoring to strike the artery of supply, and sometimes had produced a decided effect.

Dr. Hardaway urged the advantage of electrolysis in that it is manageable. If after the operation hot water is applied freely and frequently there will be less inflammatory disturbance.

Dr. Sherwell, of Brooklyn, made some remarks on "A Mooted Point in the Etiology of Psoriasis." Evidence adduced from various authors confirmed the author's view that patients with psoriasis usually have good health. He favored Piffard's theory that the rheumatic diathesis is the great exciting cause of psoriasis.

Thursday, at the morning session, the following were elected officers for the coming year:

President, Dr. E. Wigglesworth, of Boston; *Vice-Presidents*, Drs. I. E. Atkinson, of Baltimore, and A. R. Robinson, of New York; *Secretary*, Dr. G. H. Tilden, of Boston; *Treasurer*, Dr. H. W. Stelwagon, of Philadelphia.

Dr. G. H Fox described "Two Cases of Dysidrosis," The first of these was twenty-nine years old, and had always perspired freely. Four years ago an eruption first appeared on the palms of the hands. The soles of the feet had also been affected at one time. The skin of the hands was thickened, of a dark hue, and had numerous elevations averaging in size that of a hemp-seed. There had been no moisture and no itching nor any peeling of the skin. The second case was a cook, forty-six years of age, of good general health. The present trouble had continued for five years, an eruption on the face of vesicles of varying size containing clear fluid.

Drs. Robinson and *Stelwagon* both regarded the latter as by no means a rare condition, especially in washerwomen and cooks Dr. S. said that the only description of the disease which he had been able to find was in Dr. Robinson's treatise on skin disease under the name of sudamen.

Dr. A. R. Robinson, of New York, then read a paper giving some "Mycological Studies in Tinea Favosa and Tinea Tricophytina." Noting the varying susceptibility of different individuals to parasites, he observed that children are more apt to suffer with tinea tricophytina and favus, adults with tinea versicolor. In many cases of parasitic disease there is previous impaired vitality.

Dr. White laid less stress upon the condition of impaired vitality, and never had seen any necessity for internal medication. Different speakers expressed quite contrary opinions on this point.

Dr. Heitzmann then read a paper on "The Structure of the Derma and the Development of Elastic Tissue in it."

Dr. W. A. Hardaway described "A Case of Multiple Myomata of the Skin accompanied by Severe Pain." A strong, healthy man, a peddler, aged thirty-six, married, having a good family history and healthy children and never having had syphilis, observed a year ago that changes in the weather produced pain in certain localities on his back where more recently peculiar growths had formed. These pains recur at intervals of one night to a week, each attack lasting but two or three minutes. The epidermis is not abnormal. On passing the hand over these growths there is no hyperesthesia, but deep pressure causes intolerable suffering. Microscopical examination of one of the larger growths showed it to be composed of smooth muscular fibre. Viewed from a clinical standpoint the case strongly resembled some cases of neuroma which had been reported.

Dr. R. B. Morison, of Baltimore, reported "An Unusual Case of Tylosis of the Hands." The patient was a negro, aged thirty-two, muscular, well developed, and apparently healthy. He had been a fireman on a steamer for ten years, shoveling coal, grasping the upper part of the shovel with the right hand and the left hand sliding up and down on the handle. Two fingers of the left hand were worn off to the second joint, while the other two were going the same way, the nails having disappeared. On several occasions he had drawn pieces of bone from his fingers. There had been no pain at all. On this hand there were some large blisters, underneath which there were red, granulating surfaces, which were painless. There was no history nor evidence of syphilis. Specific treatment had been in vain. The man obstinately refused to cease work, so that little could be done in the way of treatment.

Dr. Wigglesworth remarked that in some respects this disease seemed to resemble anesthetic leprosy.

Dr. L. A. Duhring, of Philadelphia, read a paper on "The Relation of Herpes Gestationis and Certain Other Forms of Disease to Dermatitis Herpetiformis." The author showed that the name "herpes gestationis" is a misnomer, inasmuch as the affection is not peculiar to the female sex. He claimed also that this disease is identical with the vesicular form of dermatitis herpetiformis, and that certain other forms of herpes, as well as other affections, are also to be regarded as examples of dermatitis herpetiformis. He cited cases from English, German and French authors to prove his views. The discussion on this paper was by Drs. White, Robinson, Hyde and Fox.

Dr. G. H. Tilden, of Boston, then read a paper on "Mycosis Fungoïdes," describing the case of a man, twenty-eight years old, when first observed, and who succumbed to the advance of the disease in about three and a half years, though not under observation during the last month. Notes on the literature of this disease concluded the paper.

Dr. White completed the history of Dr. Tilden's case, the patient having been under his care at the time of his death, which resulted directly from the occurrence of diarrhea.

Dr. Robé described a similar case in a man 62 years of age who had been under his care four years before.

Dr. Morison said that only by the microscope could this disease be distinguished from multiple sarcoma of the skin.

Dr. Fox had seen one or two cases of this disease. He would be disposed to try the effect of chaulmoogra oil if another case should come under his care. He had seen most happy effects from the use of this oil in leprosy.

Dr. Heitzmann said that the microscopic appearance in this case indicated that it was a lympho-sarcoma.

Drs. Hardaway and *Sherwell* referred to cases under their observation of alveolar sarcoma and melano-sarcoma respectively.

Dr. L. N. Dunlow, of St. Paul, then read a paper on "Urethral Irritation in the Male as a Cause of Certain Neuroses and of Acne." He reported a number of cases in which the treatment and cure of various forms of urethral irritation had been followed by marked improvement or cure of the acne eruption. He advanced no theory as to the relation existing between the two conditions.

This led to quite an animated discussion. The author had found

good results in using ergotine, in addition to external treatment for acne in women. *Dr. White* had had no satisfaction in using ergot. *Dr. Taylor* condemned the unnecessary cutting of the urethra, which he thought far too common at the present day. While *Dr. Sherwell* thought that acne is often a reflex trouble he did not find it necessary to introduce a sound into the urethra of every patient with acne. In exceptional cases it was a valuable means of treatment. He had been led to prize ergot, especially with women. *Dr. Hyde* thought that in a good many of these cases the acne was the specific effect of balsamic remedies taken for urethritis. *Dr. Stelwagon* had used ergot in a good many cases, but could not say that the results had been at all satisfactory.

Dr. Heitzmann spoke of several practical points. He uses the Leclanché battery in electrolytic treatment on account of the steadiness and freedom from pain of its current. It had proved in his hands a valuable mode of treatment of dilated bloodvessels on the face; less so of port-wine marks. Sodium ethylate, which had been highly recommended for the destruction of angioma of the face, he regarded as not at all superior to nitric acid.

For falling of the hair from seborrhea he states that further experience confirms the value of the treatment which he recommended in 1876, viz., the application of a ten to twenty per cent. ointment of oleum rusci crudum. The following formula recommended by Wertheim, of Vienna, has proved valuable in the removal of freckles:

℞ Hydrarg. ammon. mur., - - - grams 3.75
Magist. bismuthi, - - - - " 3.5
Ung. glycerinæ, - - - - " 30.0

M.

This is to be applied in a thin layer every other night, and in four to six weeks the result is very satisfactory.

As to the reappearance of hair after removal by electrolysis, he considers it to be due to the growth of the fine hairs, whose growth is stimulated by receiving the nutrition formerly supplied to the hairs which have been removed. In this view Dr. Hyde concurred, and he held that the electrolysis itself produced a condition of hyperemia, and increased nutrition of the fine hairs. Dr. Fox doubted any such influence.

Dr. Robinson had used such an ointment for freckles as that which Dr. Heitzmann had spoken of, but the effects are only

temporary. Dr. Wigglesworth had also used a very similar ointment.

Dr. Duhring had found satisfactory results from oleum rusci in seborrhea of the scalp, but the odor of it is very objectionable.

Dr. Hardaway referred to his experience with electrolysis, probably longer than that of any other member of the association. He uses the irido-platinum needle, which is flexible and, therefore, less liable to pass through the follicle wall than a rigid needle.

Dr. Taylor read a paper on "Syphilitic Reinfection," adding to the cases hitherto reported the histories of three others. He stated that he had seen a fourth case, but the history of this case was not fully prepared. In all these cases the possibility of relapsing indurations being mistaken for reinfection had been carefully excluded.

Dr. H. W. Stelwagon, of Philadelphia, then made some "Observations on the Oleates." He thought that the oleate of mercury was the only one likely to retain permanent place in the treatment of skin diseases. This he considers of special value in treatment of ringworm of the scalp, but for inunctions in syphilis he did not regard it as equal to blue ointment.

The general expression of opinion was adverse to the oleates, or at least that they had been disappointing and much overrated. The mercuric oleate was accorded merit as a parasiticide, and had proved serviceable in recent ringworm of the scalp, but had generally proved a failure in chronic cases.

Dr. Denslow reported a case of "Syphilitic Aphasia and Paraplegia." The patient had died within nine months of the appearance of the primary lesion, aphasia and paraplegia having developed a few days prior to the death. Severe syphilitic cephalalgia had been relieved on two occasions by the use of iodide of potassium. The autopsy revealed thickening of the dura mater along the superior longitudinal sinus, and also numerous small gummata along the right border of the longitudinal sinus.

A Cremation Society has been organized in Detroit. The members are to pay annually into the treasury a fixed sum which is to insure cremation for them in case of their death. It is the intention, as soon as the necessary funds can be accumulated, to erect a crematory in that city.

SELECTIONS.

BRONCHITIS—ACUTE AND CHRONIC.

By J. Milner Fothergill, M. D., Edin., *Hon. M. D., Rush Medical College, Ill., Physician to the City of London Hospital for Diseases of the Chest (Victoria Park.)*

Acute bronchitis is a malady fraught with great danger to life in the very young, the very old, and in those already enfeebled by pre-existing disease. With robust persons in youth and middle age it is comparatively rarely fatal. It is, then, a malady which taxes the bodily powers: if they can be maintained, then all is well, and the disease runs its course safely. Failure of the powers is the matter upon which the physician must keep an unwinking eye. If he loses sight of this cardinal matter the case may easily slip through his fingers.

Bronchitis has its two distinct stages, each requiring its own appropriate treatment. There is, 1, the stage of arrested secretion, and, 2, the stage of excessive secretion.

1. Stage of arrested secretion. Cold is probably the excitant of bronchial inflammation. The poor baby crying in the cold, taking in the chilly air by its mouth, and thus missing the warming plates of the turbinated bones, is usually the victim of bronchitis a few days subsequently. A garrulous old man is talking in a keen wind, and the same result follows. Of course the deed is done before medical aid is sought. In bronchitis distinct rigors are rarely experienced, merely some chilliness, or at most a feeling of some cold water running down the back. The respiration is labored, because the swollen bronchial mucous membrane lessens the bore, calibre, or lumen of the bronchial tubes. Of course the finer the tubes implicated the more this is felt. When the fine tubes are largely affected, then the attack is termed "capillary bronchitis," and the danger to life is great. Such is the bronchitis set up by a thick

London fog, which often slays its hundreds of victims. The expectorated phlegm, when the secretion stage is reached, is not the white froth of ordinary bronchitis, but a grayish mass not unlike an oyster in hue and bulk. Where the larger bronchiæ are chiefly the seat of disease then the malady is comparatively insignificant.

In the first stage of bronchial dryness there is usually much irritation, much useless unavailing cough, for there is, as yet, nothing to be got up. The skin is usually dry. There is rarely marked pyrexia. The first step is to soothe the irritated membrane and to secure secretion. Relaxants are indicated, and of old nitrate of potash with tartar emetic would have been the line taken, with some opium and Plummer's pill at bedtime. The indications are to relax the swollen, turgid, dry mucous membrane, and to relieve the cough. The local application of steam, plain, or medicated, by means of the "bronchitis kettle," is always good, and can be continued at intervals for hours, indeed until the described end be attained. Then if there be much complaint of rawness or soreness down the sternum, counter-irritation over the front of the chest is often very useful. As a pupil of the late Professor J. Hughes Bennett, of Edinburgh, of course I did not believe in counter-irritants on starting practice; but my results were so far below those attained by my father, on the old-fashioned plan, that, perforce, I was driven to follow his plan or lose the patients. The best counter-irritant is undoubtedly croton-oil liniment; but it has the drawback of its effects if any other parts of the body, especially where the skin is tender, be accidentally touched by it. Especially is such counter-irritation required by robust countrymen. Then as to the general treatment.

At bedtime a dose of Dover's powder may be indicated, or a grain of opium with James' powder. If a robust man, a few grains of calomel may not be out of place. Whatever may be the objections to the use of opium later on—and they are overwhelming—the sole objection to its employment at this stage is its effect in arresting bronchial secretion. If there be much suffering and irritative cough, the lesser of two evils may be some opiate. Then, if a robust person, the treatment may consist of vin. antim., ℥ xv., vel tinct. aconiti, ℥ xv.; sp. mindereri, ℥ j., t.i.d. If a delicate person, pot. iod., gr. iij., sp. mindereri, ℥j.; t.i.d. (sp. mindereri is liquor ammoniæ acetatis). Hot bottles in bed help to procure free perspiration, by which the general vascular turgescence is relieved,

and that of the bronchial mucous membrane as well—the thing desired. In one case encountered in my early days, the young man had repeated attacks of bronchitis, always stubborn in the first stage, for which my father bled him with excellent results; and I had to bleed in another attack after having exhausted my armamentarium of less heroic remedies. When the skin is got to act freely, then the bronchial membrane loses its irritability and secretion sets in, and the case enters upon its second stage.

2. Stage of excessive secretion. With the change in the condition of affairs comes the corresponding change in the treatment. Our object now is not to relieve the discomfort and promote secretion, but to enable the patient to get up the secretion with which the air-tubes are more or less choked, and which, if not got rid of, will accumulate and suffocate the patient. Now comes the struggle between the malady and the patient's power of endurance. No depressants are required now. Opium will arrest the secretion and clog up the bronchiæ. The patient may be wearied with the fight and crave for sleep, begging hard for a narcotic. A narcotic! Why, if it were not for the absolute necessity for voluntary effort to maintain the respiration, the patient would be off to sleep—like Damian in the intervals of the rack—without any need for a narcotic. To give a narcotic is to paralyze those very efforts without which life would soon ebb out. The patient is breathing for dear life, and what we have to do is to help the taxed organism to maintain the struggle. To drag the air through the obstructed air-tubes is trying work. Then cough is required to get up the obstructing mucus. What we now require, *par excellence*, are stimulants to the respiratory centre. The best known of these are ammonia, atropia, strychnia, ipecacuan, and squills. The combination might stand thus:

℞ Amm. carb., - - - - - - gr. iv.
Tinct. nuc. vom., - - - - - ♏ x.
Inf. cinchonæ, - - - - - ℥j.
4tâ vel 6 tâ horâ.

If it be desired to keep up the secretion, then serpentaria might be substituted for the cinchona. Senega is in repute, but its taste is most objectionable; if it be used, some spirits of chloroform must be added, by which it is rendered much less offensive. If the case be a bad one, probably the above combination had best be adhered to. If life is not gravely endangered, then

℞ Liq. atropiæ, - - - - - - ♏ j.
Liq. am. anisat., - - - - - - ♏ xv.
Aquæ, - - - - - - - - ℥j.
M. 6â vel 4 tâ horâ,

may be preferable. If the case be mild, then

℞ Ac. hydrobrom., - - - - - - ʒ ss.
Sp. myristicæ, - - - - - - ♏ ij.
Syrupi., - - - - - - - ℥ ss.
Sp. chloroformi, - - - - - - ♏ xv.
Aquæ, - - - - - - - - ℥j.
M. Three or four times daily.

may be sufficient; and a very elegant and palatable cough mixture this forms.

Bronchitis runs a definite course; and here, as in fevers, to tide the patient over the limited time is to save him. Failure of the powers under the demand upon them is the danger to be steadily kept in view. These powers must be sustained by meat-broths containing baked flour (*i. e.*, starch largely converted into soluble dextrine) and milk, with malt extracts or malted preparations; in fact, food containing grape sugar—the natural food of the body. Alcohol may be indispensable, and must be given with no niggard hand, if need be. Support! Supporting measures of all kinds in unstinted quantities are indicated. But there is one part of the organism that specially needs support, and that is the right ventricle. The strain on the right heart is at times tremendous, and failure of the right ventricle is the common cause of death. The right ventricle of a dugong, or other diving mammal, would be a grand acquisition in a bad case of bronchitis. If there be a pre-existing mitral lesion, then the state of the right heart is a cause of the gravest anxiety.

On commencing practice a number of cases of bronchitis went the wrong way, despite my utmost efforts. Chagrined and complaining of this one day to an old practitioner, and saying that in each case there was a mitral lesion, he consoled me thus: "You will find such cases will all die!" This was comfort of a kind; but the remark induced me after that to take the condition of the right heart into my calculations; and after that my results were more satisfactory. Digitalis was added to the mixture; and then my old friend's forecast was falsified! A hot bottle, or hot bran-bag, or

hot poultice over the front of the chest is not only comfortable, but it keeps up the action of the heart, as well as loosens the phlegm.

Acute bronchitis may occur primarily and leave a chronic condition behind it, or it may occur as an intercurrent condition in a case of chronic bronchitis. When acute bronchitis is a primary malady it usually leaves behind a certain amount of vesicular emphysema, which in young subjects usually disappears; but occasionally one comes across a case of chronic bronchitis with well-marked emphysema in a girl barely in her teens. For aiding the recovery of the lung-elasticity strychnia seems to me the best drug. As to the resultant chronic bronchial condition, it may require iron in atonic cases. In gouty cases solvents of uric acid, potash, and lithia are indicated. Balsamic remedies are useful in all chronic catarrhal conditions of mucous surfaces, from urethritis to a bronchial flux.

Chronic bronchitis.—This condition usually dates from some acute attack in the past, sometimes in the by-past. It may be a rheum without any true inflammatory first stage. As such it is an outcome of mitral disease, often masking the cardiac condition. Rarely, if ever, is it found without more or less emphysema. Every acute exacerbation leaves a worse condition of emphysema behind it. In the young the lung largely recovers, but not so in older subjects. Pursy or broken-winded before a new acute attack, the chronic bronchitic comes out of the struggle worse broken-winded than before. The efforts of coughing have further strained or ruptured lung tissue no longer possessed of the elasticity of early years. Consequently it is of great importance to avoid all acute bronchial trouble as far as possible.

This condition of emphysema is one of great clinical interest. Ordinarily it is assumed that emphysematous persons are barrel-chested. This is a very crude view. Of course, all are most familiar with the barrel-chested, red-faced, blue-lipped, puffing persons obviously emphysematous. At each inspiration the sterno-mastoid muscles are seen to stand out like plough-cords. Often the skin between them can be seen to be sucked in simultaneously —deep fossæ being formed. The act of inspiration is a laborious one. Except when bustled by effort, the respiratory act is not increased in number per minute. The acceleration produced by effort will often tell more accurately than physical examination of the

chest of the actual extent of the emphysema. If the patient be in bed, the respiration is seen to be distinctly abdominal. The comparatively immovable thoracic case is lifted up bodily by the neck muscles while the diaphragm descends. The lungs are too full of air even upon complete expiration. If called upon to speak the patient will rest his elbow upon the nearest object, so as to fix the shoulder, and then take a breath. If sitting, both hands will be seen resting on the thighs, so as to fix the shoulders, and thus get the benefit of the accessory muscles of respiration. On physical examination cardiac dulness is more or less completely lost from the attenuated lung spreading over the heart. The liver dulness does not commence till the ribs are nearly reached, and then the liver, pushed downward, is found extending considerably beyond the border of the ribs. The diaphragm of the emphysematous person is flattened; it is dragged down by the violent inspiratory efforts, while the voluminous lungs obstruct its return. The viscera on the abdominal side of the diaphragm are pushed down bodily. The thoracic space is thus increased. But if the abdomen be distended with flatus, then the descent of the diaphragm is impeded, and a condition of "asthma" is set up. Indeed, "wind" is the plague of their lives with emphysematous persons, with or without bronchitis.

All chronic bronchitic persons are more or less emphysematous, and therefore what has just been said applies to them. In addition, they have often some thickening of the bronchial lining membrane, which adds to their dyspnœa. Sometimes they have genuine attacks of spasmodic asthma.

The lines upon which such cases are to be treated are as follows: The respiration is embarrassed, and therefore, a stimulant to the respiratory centre is indicated. So strychnia comes first. Then it is well to keep the bronchial secretion free and unchecked, and for this end ipecacuan suggests itself. But ipecacuan is a tonic to the liver as well, and so is doubly useful when there is nervous congestion. Some might add some benzoic acid. The right heart is embarrassed, so some digitalis will be useful. Then as to carminatives for the "wind." The essential oils, the peppers, and the nauseous gums are all good for flatulence. In pill form, a good combination is as follows:

℞ Strychniæ, - - - - - - gr. $\frac{1}{24}$.
Pulv. ipecacuan, - - - - - gr. $\frac{2}{3}$.
Pulv. digitalis, - - - - - - gr. $\frac{1}{3}$.
Pil. galban. co., - - - - - gr. ij.
Bis aut ter in die.

If the bowels are not regular, a small quantity of podophyllin or croton oil may be added. To some readers such a compound may seem ridiculous. A derisive smile may flit over the features, betraying what is passing through the mind. But all the same this pill has done wonders for a large number of persons whom I know and have prescribed for.

And now as to rest at night, a very important matter. It may be well to try a mixture, so:

℞ Bromidi ammonii, - - - - - ℈ j.
Tinct. camphoræ, - - - - - - ℥j.
M.

A favorite night pill with my late father, who had an extensive experience of bronchitis in all forms, was:

℞ Morphiæ mur., - - - - - - gr. $\frac{1}{4}$.
Benzoic acid, - - - - - - gr. j.
Pil. scillæ co., - - - - - - gr. ij.
M.

Here the benzoic acid counteracted the effect of the morphia upon the bronchial mucous membrane, and prevented arrest of the secretion. And such a pill really does give a great deal of comfort to old bronchitics whose rest at night is broken by bouts of coughing. Paregoric or tinct. camph. co. is a compound built upon this plan, and is often of great service where opium or morphia alone are baneful remedies.

Usually on leaving the recumbent posture on waking a coughing bout commences. Phlegm has gathered during the night on parts which have become more or less accustomed to it. But with movement the phlegm is dislodged, and then cough is set up for its removal. The accumulation of the night is thus got up after much exertion, and then the chest is comparatively clear of phlegm, and comfortable. Sometimes the morning cough is trying, and shakes the sufferer terribly. Some hot tea or other hot fluid affords relief; while it is well to teach the patient how to cough properly. There may be no education possible or required in the matter of

sneezing, but certainly this is not the case with coughing. The patient must be taught to fill the chest with air before giving way to the expiratory action—cough. Watch a person who has never learned to cough. See the futile attempts. The shallow inspiration, the useless, impotent cough. At last a paroxysm of cough comes on, the chest becomes fully inflated, and then the cough which follows expels the offending phlegm, a sense of relief following its ejection. When we reflect upon the sacculated condition of the bronchial tubes, and remember the firm wall of hardened-lung tissue of these bronchiectases, we can see how full inflation of the lung is essential for such compression as alone can force out the contents of such sac. To first fill the chest with air is the one condition of successful cough. To learn to do this is to save much useless coughing, and much strain upon the lung tissue, leading to further emphysema. So much for learning to cough.

When the phlegm is hard to get up, from some check to the bronchial secretion, the inhalations of steam are good, and iodine, Friar's balsam, eucalyptus, and other agents may be added to the steam. Some persons burn benzoin pastilles.

There are some points about the clothes and hygiene of chronic bronchitics worthy of mention. They are a chilly race, from impaired oxygenation and defective heat production. They are scant of breath, and cannot get about. They must be warmly clad; yet they cannot bear any weight of clothes. Consequently their clothing must be light as well as warm. Furs in the daytime out of doors; down bed-quilts for the night. Warm underclothing in the day; and a flannel night-gown. On cold nights a fire in the bedroom is good. A respirator is invaluable for preventing fresh attacks of cold. Fifteen years' experience of a respirator has told me its value and entitles me to speak. Never mind its unsightliness, or the remarks it may provoke on the part of the thoughtless, or even the sympathy of others. Like the gloves, it should always accompany hat and stick. If it had not been for a respirator the writer would have been a pursy, broken-down bronchitic, instead of a well and fairly preserved man approaching middle age.

Then, again, remember the position of the liver. Pushed out of its warm nook, thrust down so that much of it is only covered by the thin abdominal parietes, it is liable to chills. Consequently a cummerbund, or broad belt of several thicknesses of flannel, is most desirable. This protects both the liver and the kidneys.

Specially is this last matter of moment where there is a gouty element in the case—a very common complication. The food should not be too highly albuminous; and the patient ought to be encouraged to take fat as far as possible in any and every form.

By such measures the chronic bronchitic may live on for years —practically on sufferance, *i. e.*, by taking proper care, death being the result of neglect or forgetfulness.—*Med. Record*, Aug. 28, 1885.

THE ARGUMENT AS TO CONSANGUINEOUS MARRIAGES FROM THE LOWER ANIMALS.

The important question which is the subject of a contribution on another page of the *Journal*, is one which in the human subject must always be difficult of solution, on account of the many complicating circumstances which are present in every case of consanguineous marriage, and because of the impossibility of controlling the experiments. For this reason particular interest attaches to the study of the effects of in-breeding in animals. The objection against analogies so drawn, that animals coupled by breeders are selected for their freedom from defects and are therefore not fairly representative of what may be expected from human union, is faulty for the reason that as bearing on the influence of consanguinity it is just those cases when all extraneous influences as those of morbid inheritance are shut out that give the best opportunity for judging fairly of the effect of consanguinity as a factor.

The opinion of Darwin is well known, that all beings, animal and vegetable, profit from an occasional cross with individuals not kindred in origin. There can be no doubt in any mind that when once taint or degeneration has begun to develop in an animal, the only salvation for the offspring of such an individual lies in the obliteration or mitigation of the defect through the admixture of a blood free from any similar imperfections, such a result being attained with the greatest certainty in an individual having no kinship with the one affected. The chance in nature that animals and plants by continually uniting with individuals near, by propinquity and relationship, will fail to obliterate, and will in fact intensify any incipient abnormality, is so great that nature has provided, notably in the great order of orchids, for a system of cross fertili-

zation by the mediation of insects. Yet in some variety of orchids and in many other plants self-fertilization is the rule. Incestuous unions among animals in a natural state are by no means uncommon.

When through the intelligent selection of the stock-breeders the animals brought together are both perfect specimens, even though closely related, the offspring is not only free from deterioration, but often presents an intensification of the good points of his progenitors. This was, in fact, the means by which Bates, Bakewell, the brothers Collings, and other famous English breeders developed some of the most remarkable breeds of cattle.

The criticism has been made by some writers that those various created breeds of animals are, after all, abnormalities—"perfect pathological specimens," as Mitchell puts it—not so useful to themselves as their less highly bred fellows. Of course various points may be selected for which to breed, for instance, either wool or flesh in sheep, draught or speed in horses. An excessive development of fat, as in a prize pig, may impair not only the physical symmetry, but the power of locomotion and of procreation. But that animals are necessarily deteriorated by being bred for some particular point is by no means true. The most eminent authorities agree that for endurance of work no horse can beat the thoroughbred.

There is, we are aware, still a dispute among cattle-raisers as to the desirability of long-continued in-and-in breeding, some claiming that such animals will sooner or later "run out" unless crossed. Into this controversy we do not propose to enter. We will simply state that it has been the custom of many breeders to mate animals which presented the desired qualities, irrespective of what is considered the accident of their relationship. Moreover, as importers often start with a single pair, the strain is procreated without any outside intermixture, as is done by Price in the case of his excellent breed of Herefords. This breeder did not go beyond his own herd for a bull or a cow for forty years. Of course, when any organ or function in the stock is becoming developed at the too great expense of the others, the in-and-in breeder, like any other, will find it necessary to re-inforce the defective side, and a cross becomes necessary, simply because the desired variation can no longer be found in the same family.

The most important point to be borne in mind in considering

the results in in-breeding in animals is that the closeness of the unions is out of all comparison with that attained, or by any possibility attainable, in the human subject. The long period of childhood in man, to say nothing of moral and social considerations, would prevent his ever being united in such closeness of consanguinity as that in which animals are constantly mated. The child of first cousins has twenty-five per cent. of the blood of his parents' common ancestor. The child of brother and sister has 50 per cent. The man who commits incest with his own daughter can transmit to the child of such a union only 75 per cent. of his blood. Yet the herd books are full of cases of animals having 50 to 75 per cent. of the blood of progenitor. The great majority of the descendants of the noted Jersey bull, St. Helier, have more than 50 per cent. of his blood, several have 75 per cent, and one has 87½ per cent. Huth records that the bull Bolingbroke was matched with his half-sister Phœnix and produced the bull Favorite. Favorite mated his mother, sired the cow Phœnix (2^5). He was then put successively to his daughter, daughter's daughter, and daughter's daughter's daughter, he being the sire in each case. This gave a cow which had no less than 93¾ per cent. of Favorite's blood. She was put to a bull having 62 per cent. of Favorite, and the offspring was Restless, an eminent breeding cow.

The history of the Jersey breed, formed on a small island no larger than a western farm, and kept rigidly from all foreign mixture, is well known to all. This in-breeding was directed to one end, namely the increase of the butter yield, and while a fair production from a good average cow is four pounds of butter per week, a Jersey cow has recently produced more than ten times that weight of butter in seven days. Of course such a forcing of one function is attended with risk, but who will say that as a whole the purest specimens of the Jersey breed are lacking in intelligence, health or fertility?

Mr. Campbell Brown, recently writing in regard to the enormous proportion (some 40 per cent.) of the class of 2:30 trotting horses which are directly descended from one horse, Rysdyk's Hambletonian, and speaking as a disbeliever in in-and-in breeding, says that the above horse was not himself highly in bred, having but 25 per cent. of the blood of another great stallion, and adds, that this is "a degree of in-breeding to which there can hardly be rational objection." This per cent. is precisely that which first cousins transmit

to their children of the blood of their common ancestor. Whether then we hold with the one, and that a large and growing school of stock-raisers, that the closest incestuous breeding of animals may be practised for many successive generations without evil results, or whether we adopt the entirely conservative view that at least the lower degrees of in-breeding, involving a duplication of blood to the extent only of 25 per cent., are to be safely practised, the inference from the analogy of the lower animals would seem to be that in the human species an occasional union between first or second cousins is likely, so far as concerns the single fact of consanguinity, to give rise to no deleterious results.—*Boston Medical and Surgical Journal*, August 27, 1885.

TREATMENT OF CHRONIC CYSTITIS IN WOMEN BY IRRIGATION.

By W. J. Sinclair, M. A., M. D., *Hon. Physician to the Manchester Southern Hospital for Women and Children.*

"The treatment of chronic cystitis is most aggravatingly difficult. Temporary improvement may easily be effected, but relapse constantly occurs. Yet the disease is so frequent that the practitioner must be provided with many resources." These are the words with which the late Professor Thorburn introduces the treatment of chronic cystitis. Further on, in discussing the treatment of this disease by means of artificial vesico-vaginal fistula, he says: "The good results in the cases I have seen recorded are so far short of expectation that I advise the practitioner to leave the matter yet awhile in the hands of experimenters." (A Practical Treatise on the Diseases of Women," p. 550.)

Accepting these quotations as a fair description of our present position with regard to chronic cystitis, I shall not occupy space in reviewing recent discussions and writings on this subject, but shall proceed at once to the details of what I may call experiments in the treatment of this disease. These are not by any means matured and perfected; they are given in the somewhat raw state, in the hope of attracting attention to what I believe will come to be recognized as a valuable assistance to the treatment of this usually intractable disease, and of thus leading others to experiment and de-

velop the process more rapidly than I could possibly do with the occasional cases that come under my care.

On March 14, 1884, a young woman was admitted into the Manchester Southern Hospital under the care of Dr. Thorburn. There was a history of chronic cystitis of two years' standing, during the whole of which time she had been under medical treatment without deriving any benefit. She had recently consulted Dr. Thorburn, and he, on learning her circumstances, advised her to enter the Southern Hospital. For six months she continued under his care, and during that time every recognized method of treatment seemed to be tried, with the exception of making a vesico-vaginal fistula. It may be taken for granted that the catalogue of remedies, both internal and topical, was exhausted, and that the manipulations necessary in the local treatment had been conducted by the house-surgeon and nurses in a thoroughly efficient manner. There had been temporary improvement and relapses, but in September, when the patient came under my care owing to Dr. Thorburn's inability to visit the hospital, she was much the same as she had been at the time of admission. Whenever she was left for a day or two without local treatment there was a considerable mucopurulent deposit in the urine, and, treatment or none, she had to be up from ten to twenty times in the night, sometimes oftener.

Considering the modes of treatment that had already been tried, it was apparent that no good could result from going over the old ground, and therefore some other method had to be found. I had the same repugnance as Dr. Thorburn to making a hole in the bladder. It seemed that all the advantages of having a fistula, without any of its drawbacks, could be gained by a constant irrigation at an even temperature, if a suitable apparatus could be contrived, and also that by such irrigation advantages could be gained that were lacking in the condition produced merely by a fistula. After various trials, the apparatus about to be described was devised and successfully applied to the treatment of the case. It is extremely simple in actual practice, however complicated the description may make it appear to be, and if constant irrigation at an even temperature with a medicated fluid will cure chronic cystitis, we ought to have here the rudiments of an eminently useful apparatus.

For purposes of description the apparatus may be said to consist of three parts: A tank of cold fluid, a beaker in which the fluid is kept warm, and a catheter.

The most convenient vessel to form the tank, because it is in common use among chemists, and therefore easily procurable, was found to be the strongly made glass percolater (A in fig. 1.) It is cylindrical, with an opening on the top, and an exactly similar opening on the side almost on the level of the bottom of the vessel. One of these vessels, capable of containing over a gallon, was fitted with a solid india-rubber stopper (*a* fig. 1) for the opening above, and the opening below was fitted with a glass tube by which to convey the fluid to the beaker. It was found that this could best be done by means of three quarter inch glass tubing bent in the manner shown in the diagram, the connection with the tank A being made by passing the end of the tube through a perforated india-rubber stopper (*b* fig. 1). To break the rigidity of the con-

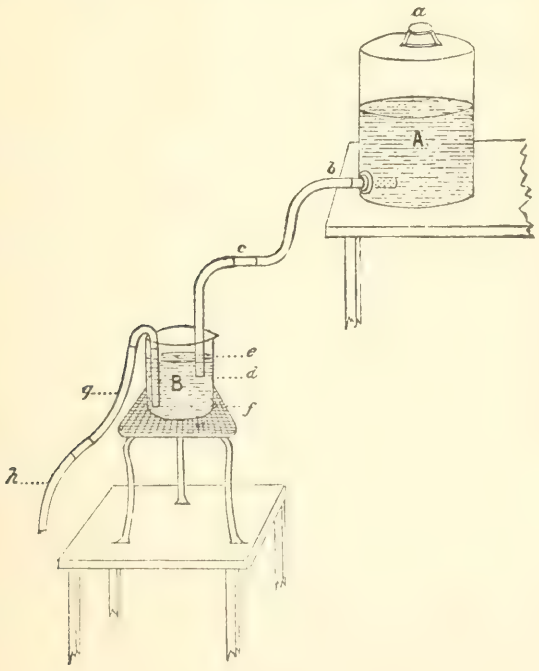

Fig. 1.

nections, and in order to arrange so that the tube would dip properly and at a convenient angle into the beaker, it was found to be best to join two pieces of glass tube by means of a piece of three-quarter inch gas-tubing (*c* fig. 1.) By this means a sort of firm

elastic joint was made at *c*, which was found a great convenience in working the apparatus. The smaller vessel (B fig. 1) is an ordinary glass beaker, capable of holding about a quart. It is placed upon an iron tripod, upon which is laid a piece of wire gauze to form a firm support for the beaker. The tripod is placed upon a small table which can be raised or lowered as required, and between the legs of the tripod is placed the heating apparatus, a gas jet, spirit lamp, or any suitable contrivance. It will be seen that all the elements that go to form this part of the apparatus are things in common use, and easily obtainable in any town. Now, with such an arrangement of parts, if the large vessel A be placed at a suitable height above the vessel B, with the point of the tube from A (*d* fig. 1) dipping to about the level represented in the diagram, and if the siphon (*g* fig. 1) be placed in position dipping into B to about the level of *f*, we have the apparatus ready for the fluid. To fill the apparatus, a cap should be placed upon the end of the tube at *d*. The necessary cap can very conveniently be made by taking two inches or so of the kind of gas tubing which makes the joint at *c*, and closing one end by tying it with a strong piece of twine; this slipped over the end of the glass tube makes a perfect cap which can be very easily removed at the proper time. The fluid is poured into the vessel A through the opening on the top, and when a sufficient quantity has been put in the india rubber stopper is inserted so as to make the orifice air-tight. If now the cap be removed at *d*, the fluid will slowly run out till its level in B has risen to *e*, that is, till it is an inch or so higher than the level of *d*. The air which has been passing into A and displacing fluid ceases to enter the tube as soon as the fluid in B has reached the level of *d*, but the air already in the tube and rising in bubbles through the fluid in the vessel A must reach its destination in the space above the fluid in A, and displace its equivalent of fluid before an equilibrium is obtained. The liquid in the two chambers and in the connecting tube will now remain at rest if let alone. There is a condition of equilibrium between the weight of the fluid in A and the pressure of the air on the open surface of the fluid in B.

If, however, the siphon *g* be now set going, the apparatus begins to work and this balance is disturbed. The level of the fluid B is lowered, in a greater or less period of time according to the calibre the tube *g*, and when it has just passed the level of *d*, air rushes

into the tube, and rising through the vessel A, displaces fluid sufficient to raise once more the level of the surface in B to the point *e*. Owing to the action of the siphon the surface in B begins immediately to fall again, and it continues to subside until once more fluid is drawn down from A, thereby raising it once more. And so on it goes, falling and rising, until the supply in A is exhausted.

When the fluid is first supplied, and before the siphon is brought into action, if a gas jet or a spirit lamp is placed under the vessel B, the fluid in it can be raised to any temperature that may be desired. To measure the temperature a small, cheap, floating thermometer, which can be got at almost any chemist's shop, may be conveniently used. It is something like the urinometer, floating upright in the fluid in the same way. The temperature should be raised to 120° before the siphon begins to act, as the fluid cools very quickly in the tubes, and it is difficult to keep it sufficiently high in temperature to reach the bladder warm. When the siphon begins to act, drawing the liquid off in rapid drops, or in a very fine stream, the quantity of fluid in B is of course diminished, and accordingly the temperature begins to rise. But before it can rise to a disagreeable extent above the point that the heating apparatus is arranged for, the level has fallen so that the fresh supply of cold liquid is brought in from A. This lowers the temperature again somewhat below the point at which the apparatus began to work, but it begins at once to rise again. The amount of fluctuation can be arranged for, according to the position of the burner, the size of the vessel, etc., but in any case it is practically nothing. There is always a column of fluid of the height *f* to *d* at the least to keep up the action of the siphon.

The siphon may be made of a piece of ordinary glass tubing of small calibre. It should be bent so as to clasp the edge of the beaker, in order to steady it. The siphon is connected with the catheter by means of a piece of india-rubber tubing of convenient length. This tube should be provided with a stop-cock, not far from the end which is to be attached to the catheter, and it is convenient to keep this tube always full, the cold fluid being allowed to run to waste before the catheter is attached. However, it may be said here once for all that there are many obvious small details, both theoretical and practical, which it would be tedious to describe and discuss, and they must be omitted, at least for the

present. One attempt to set the apparatus working will make them clearer than any amount of description.

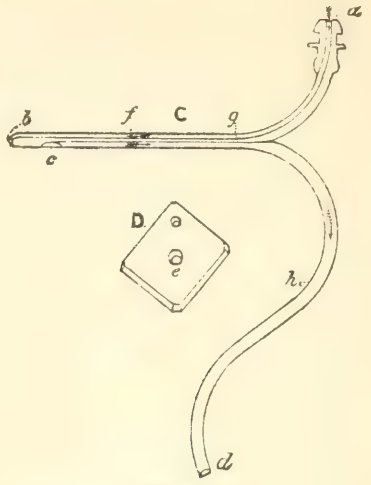

Fig. 2.

We must now examine the catheter.

After various futile attempts to work with two soft tubes introduced into the bladder, I obtained from Messrs. Wm. Wood and Sons, of Manchester, a soft red rubber double current catheter (about No. 7), said to be made by Tiemann, of New York. It has worked moderately well, but there is room for improvement. The diagram indicates the points of the instrument, but no attempt has been made to show the proportions of the parts. The catheter is attached to the tubing at the point *a* (Fig. 2, C.), and the fluid is delivered at the point *b* from a small orifice. The fluid is carried off at *c* by a wider tube, and conducted to *d*. From *b* to *g* the instrument is just like an ordinary male catheter of soft red rubber. The catheter should be sufficiently large to comfortably fill the urethra, so that under the straining which may be set up when it is first introduced, the urine shall not be forced along the sides of it. One obvious question is, how can such a catheter be retained in the female bladder? For this purpose a piece of red rubber sheet, such as is represented in Fig. 2, D, is taken, and a hole is punched in it just large enough to permit the point of the catheter to be drawn through; the catheter must be firmly clasped without being so pinched as to diminish its calibre. This piece of rubber

will remain fixed in any position (such as at *t*), in which it may be placed, and any jerk or tug at the proximal end of the catheter will only stretch that instrument, not draw it out from the sheet. From these facts it is obvious that a T bandage modified as may be desired, and passed over the piece of india-rubber, will retain the catheter in its position in the bladder by an arrangement to which women are accustomed. It is also obvious that any desired length of catheter beyond the sheet may be measured off for insertion into the bladder, and it will be found in practice that this length can be increased or diminished after the catheter is once introduced only by careful manipulation of the catheter with the tips of the fingers in pushing it through, or drawing it outwards from the orifice in the sheet.

We have now the apparatus complete, and setting it to work is a simple proceeding. The mode in which the various parts are related to one another, and the manner in which they work, must be so evident that it would be a waste of space to further describe them. Fig. 3 is a sketch from a photograph, showing the apparatus as actually at work in the hospital. The picture may help to correct any misapprehension arising from lack of details or want of clearness in the description. The tube between the beaker and the catheter should be better covered by the bedclothes and more firmly secured by safety pins than is indicated in the sketch.

The patient for whose treatment the apparatus was devised was an excellent subject for experiment. She took a most intelligent interest in all the proceedings, and submitted without a murmur to the discomfort caused by the first crude attempts to establish a double current with separate tubes. Some difficulty was found at first from the choking of the return tube with pus and slime, but this was ultimately overcome. A great desideratum in the catheter is a wide return tube. Various fluids were used, including warm water, solutions of quinine, salicylic acid, corrosive sublimate, tannic acid, carbolic acid, borax, and boroglyceride. The last was found in this case to be by far the most soothing and most satisfactory in other respects. It was persevered with, and improvement soon became rapid. It was found with the apparatus which was actually in use, that if the fluid was allowed to escape from the catheter in rapid drops the supply would last about twelve hours. During that time the patient could lie and knit or sew, or she could fall asleep or move within certain limits, without in any way dis-

turbing the apparatus. As the patient improved she was instructed to pinch the return tube (at *h* fig 2, C) where it fell over the edge of

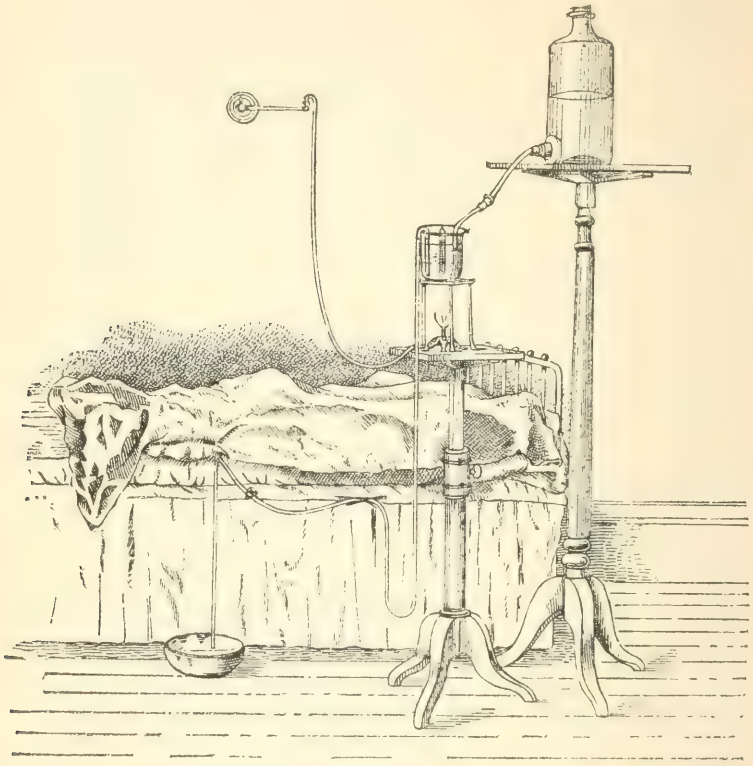

Fig. 3.

the bed, and see how long she could retain the fluid accumulating in the bladder. By this means the bladder was, I believe, gradually dilated and made more tolerant of an increasing quantity of liquid. This is a fact which indicates one advantage of the irrigation apparatus over any other mode of treatment which has hitherto been suggested. The treatment, deducting time lost in trials which failed, lasted about a month, and the patient was able to leave the hospital in November to go the Convalescent Home at Southport. She was then micturating two or three times in the night, and the urine was almost clear. I saw her when she returned from Southport, and she was then stouter and healthy looking. She was not

absolutely free from discomfort, but there had been no relapse. She was able to go back to business, and I have heard from her quite recently to the effect that she is able to attend to her duties and is practically well. The only drawback is some burning in the urethra, which still remains a source of discomfort.

I have had stands made for the two vessels, that for the beaker being a small table which can be raised or lowered to a convenient height. In a private house the larger vessel might be placed on any suitable piece of furniture which would support it at a sufficient height. The apparatus is fairly portable; it has been used in three private cases, and no difficulty whatever has been experienced in carrying it or in getting the patients' friends to understand it and keep it working. It gave great relief in a case of the bladder irritation of diabetes mellitus, and seemed to be of use by permitting of rest without sedatives in a case of hemiplegia with constant desire to micturate. At present it is again at work in the Southern Hospital on an intractable case of chronic cystitis, and has in a fortnight produced a more satisfactory result than any thing which has hitherto been done for the patient. She has a long record of treatment, and her experience so far leads her to have unbounded faith in the irrigation.

But it is not my object to give cases at present. These can be more exactly given another time. I am chiefly desirous of calling attention to the method of treatment, in the hope that others may be induced to test it as opportunity occurs to them, and that thus the apparatus may be developed and perfected. It should not be made more complicated. I have tried it with a thermostat attached, but it had no practical advantages over a careful initial regulation of the temperature, and the apparatus was found to be too complicated for even a trained nurse to manage it. The chief difficulty at present is to get a suitable catheter, but this obstacle must be readily removed as soon as the want is felt.

It is only right to warn the experimenter that some discouragement may be met with on the threshold. The chief vexations arise from choking of the return tube and from spasm of the bladder. The first of these can be overcome only by patiently manipulating the tubes and occasionally squirting warm water through the return tube, thus reversing the current. The loose shreds which cause the choking all come away with the urine voided voluntarily after the apparatus has been withdrawn for the day. This

difficulty rapidly disappears. Owing to pain and spasm it may be necessary to keep the patient under the influence of a narcotic until a good beginning has been made with the process; and care should be taken to ascertain that the fluid entering the bladder is sufficiently warm. What is the action of warm fluid as compared with cold, and whether it ought to be warm at all, what fluids are the most suitable, and what are the indications to guide us in selection, what are the anatomical changes which accompany the clinical symptoms of improvement, and is improvement lasting; these are some of the numerous questions which must be answered by further observation and experiment. Some observations have been made upon the urinary deposit when the pus stage is past, but these are as yet too crude and fruitless for further mention.

The apparatus can obviously be modified and adapted to a considerable variety of conditions besides chronic cystitis in women. I would expect, for example, that the process could be very effectively and conveniently brought to bear upon cases of metria which do not give way at once to ordinary syringing. Continuous irrigation, as at present applied to such cases, is effected by means of a very inconvenient and altogether unsatisfactory apparatus.—*Medical Chronicle*, Aug., 1885.

A CASE IN WHICH A PATIENT REMOVED FORTY-THREE CALCULI BY A NOVEL METHOD FROM HIS OWN BLADDER.

By James Murphy, B. A., M. D., etc.

I recently exhibited at a meeting of the Northumberland and Durham Medical Society, forty-three vesical calculi, and the instrument by which a gentleman extracted them from himself; and a short account of the case will doubtless prove interesting to the readers of the *British Medical Journal.*

About five years ago the patient, whose age was about fifty, and who had always enjoyed good health, was very much surprised to find one day, as he was passing his urine, that it suddenly stopped before the bladder was relieved, and, on consulting his medical attendant, the latter passed a silver catheter, and immediately struck a stone. The patient was apprised of this, and lithotrity was sug-

gested; but, being of a mechanical turn of mind—he was by profession an architect—he declined to submit to any operation, preferring first to see what he could do in that way himself. While thinking the matter over, and maturing his plans, he spent several days in trying to get the stone back into the urethra, with a view of ejecting it with a sudden flush of urine, and for this purpose he tried several positions, on his face, knees, etc., but though he could feel the stone fall on the neck of the bladder, and, as he thought, touch the entrance to the urethra, he failed to make it enter the latter. After some deliberation he constructed an instrument, consisting of a Florence flask, into which a cork was tightly fitted. This cork was perforated by a bone tube, into which a No. 10 black French catheter was made to fit with a screw; and, to make it perfectly air-tight, an India-rubber band could be rapidly passed over the joint. Owing to the extreme thinness of the glass in the Florence flask, boiling water could be poured into it, and he had some of the straw covering fitted on to the end of it, which, being a bad conductor of heat, enabled him to hold the flask after the boiling water had been poured out, while he screwed it on to the catheter previously introduced into his bladder, and produced a vacuum by the application of cold cloths to the flask. He then had an aspirator constructed, very similar to that used by Sir Philip Crampton many years ago, but of which it is needless to say he had never heard. He made several attempts with this instrument to get the stone into the urethra, for he never contemplated removing it directly by the aspirator, but never succeeded, as, not having a stop-cock as in Crampton's aspirator, the formation of the vacuum was too gradual to form a sufficiently rapid current for his purpose. He therefore soon devised another form of aspirator, which was simpler in construction, and more efficacious in use. He purchased a large ear-syringe, to which he fitted on a No. 10 catheter, from which he had removed the end as far as the eyelet; and while his bladder was full, he got on to his knees, rolled the stone about till he considered he had it at the entrance to the urethra, then gently passed his catheter with syringe attached till he struck the stone; then, without displacing the stone, he gently withdrew his catheter about an inch, and rapidly pulled out the piston, and, after some failures, succeeded in getting the stone into the urethra, when, by means of straining at first, and, afterwards, when it came within reach of his fingers, by external manipulation, he had the satisfaction of at last

getting the stone into his hand; but he found his troubles were not then ended, for he found there were some others, which he removed in the course of a few days. He then continued quite well for some time, these operations of what may well be called "litholapaxy" in no way inconveniencing him; but after the lapse of several weeks, he found the old pain in his right loin (indicating the passage of a calculus through the ureter) returning; and, after it had ceased, he again removed a couple of stones, in the same manner as previously; and so matters continued for a space of two years, calculi forming now and then, generally two or three being passed by the right kidney (never from the left), in rapid succession, and then being removed from the bladder; he continued well for several weeks, when the same process was gone through again. At last, getting tired of this breeding of stones, as he termed it, he was induced to go on a diet in which alcohol saccharine and fatty matters were avoided; and in a little time no more stones were found, and it is now nearly two years since he has been troubled with one. In all, he removed forty-three uric-acid calculi, varying in size from a No. 6 shot grain to a large pea. He generally removed them as soon as they entered the bladder, and became so expert latterly that he could generally bring the stone into the urethra in two or three attempts; but, if he were otherwise engaged, he did not trouble much about the calculi, and sometimes kept them in his bladder for a couple of weeks without removing them. But this is a practice which he cannot recommend; for he assured me that, as soon as a calculus entered the bladder, the sooner it was removed the better. He knows each of the calculi by distinctive marks, and has an anecdote about most of them. One bears the mark where it was struck by the silver catheter; another was stopped in the urethra by coming sideways, and had with much difficulty to be flushed straight; another he calls "the porcupine," as he drank some medicine to try to dissolve it, with, he alleges, the unpleasant result that the soft parts disappeared, and left several rough edges, which made him feel as if he had the fretful animal in his bladder. As is usual, a distinct history of gout was obtained.—*Brit. Med. Jour.*, Aug. 8.

MEASURES RECOMMENDED BY THE ROYAL ITALIAN SOCIETY OF HYGIENE FOR THE PREVENTION OF CHOLERA.

In a recent number of the *Gazetta degli Ospitali* are to be found the conclusions arrived at by the Italian Royal Society of Hygiene, as to the best means of preventing the spread of cholera. As these conclusions are based on the wide experience obtained from the prevalence of the dread scourge in Italy last year, they deserve attention. While offering little that has not already been recognized in connection with this subject, the whole is admirably epitomized, and for this reason, as well as the above, it is well worth consideration.

The Society announces:

I. The fundamental basis of public prophylaxis against cholera is a well-ordered, independent sanitary administration, composed of medical persons especially instructed in the subject, supported by the Government. To this end is recommended:

1. A reorganization of the existing service in the best possible manner.

2. That schools and laboratories be established to educate physicians in hygiene, that they be able to fill these high and responsible offices properly.

II. Relative to the etiology of cholera, Professor G. Sormani gave the Society the following facts, deduced from observations made during the epidemic of 1884:

1. That infected garments are the means in many instances of propagating cholera-germs, and that they are more to be feared than people themselves.

2. That the clothing of the feet should be the objects of special attention, as these, coming in constant contact with the surface of the soil, are more easily contaminated in infected places, and maintaining constantly a certain degree of moisture, can preserve, transport, and diffuse with great facility the cholera-germs.

3. Linen washed in infected water transmits the cholera.

4. That probably in linen and garments infected with cholera, and in contaminated water, the cholera-germ acquires a special character (sporification ?) whereby it has greater tenacity and duration.

5. That animals and birds, especially those which are filthy, seem to be able to carry the cholera-germ in their furs and feathers.

6. That surface-water and surface-soil have been proved to be a means of transmission of the cholera-germs.

7. That running water transports from the surface of the soil the germs, which multiply and diffuse themselves.

Therefore, he concludes that the local authorities should be empowered to take measures to prevent the contamination of the water-courses, for when this happens it will not be possible to check the spread of the disease; and that to provide efficacious safeguards against cholera the Government should favor with money and encouragement the study undertaken in Italy for a more exact knowledge of the facts which go to establish a basis of scientific prophylaxis.

III. The Society considered the means of preventing the invasion of cholera. These should consist of:

1. Strict quarantine on the frontiers adjacent to the infected countries.

2. Sanitary inspection of the quarantined. Disinfection of garments with moist heat at 100° C. Destruction of the same if polluted with infection.

3. That while free passage of new merchandise destined for commerce be permitted, all free passage of every kind of effects, garments, and objects used should be forbidden.

4. Whenever return of travelers is possible it should be done. Emigrants (operatives, peasants, and poor people) coming from infected districts should be returned under the care of the Government, and preferably by water rather than by land.

IV. The Society recommend that the quarantine laws, relative to quarantine of harbors, and pest-houses, be revised to correspond more with the altered conditions of travel. That the land and sea quarantine be proportioned to each other.

V. Relative to internal quarantine it is suggested that a sanitary cordon under the direction of the Minister of the Interior be instituted; that the circulation of people from infected districts be prevented; and that those who come should be quarantined and disinfected. The fumigation of people and of effects ordinarily performed, at the railway stations or elsewhere, ought to be prohibited as useless and also dangerous.

VI. For local prophylaxis the Society advise:

1. To combat as far as possible the first case of cholera or suspected case. That such be taken to a suitable hospital; that suitable fumigation follow, and every precaution be used that the infection do not spread.

2. To institute common ovens for practising effectual disinfection. To take great care to separate infected clothing from that going to the general laundry, and to banish useless fumigation of people and things.

3. To hinder everything tending to increase the misery and panic of the people; to favor the establishment of a public kitchen, and inspection of all alimentary substances and of drinking-water.

4. Recommending, above all, the care of the hygiene of the house, of the soil, and of the subsoil of inhabited places.

VII. Lastly, the Society maintains that in the quarantine of persons from infected districts ten days afford ample opportunity for disinfection.—*Med. Record*, August 29.

St. Louis Exposition.—The remarkable and notable success of the Second Annual St. Louis Exposition has been duly chronicled and commented upon by the secular press. It remains for us simply to note a few of the features which make it a matter of interest to the medical profession. Among these are the displays of electrical apparatus for motor and lighting purposes. The advances which have been made so rapidly in the last few years in this department of science are of the deepest interest to physicians with regard to the practical application of electricity in our professional work by way of facilitating physical exploration and otherwise, in addition to the interest which all must feel in the progress of any of the collateral sciences. One interesting and attractive feature which should be noted by physicians as well as pharmacists is the "Model Retail Drug Store," designed by Richardson & Co.

The displays of surgical instruments and appliances are well worth some careful study and attention, though we think the dealers in those articles have hardly done themselves justice. One of the most beautiful exhibits is the display of chemicals and drugs by Powers and Weightman in the west nave.

Of course the "art gallery" will command a good share of the time of visiting physicians, as it does of other visitors. It affords

a rare opportunity for study of art, as such a collection of choice and thoroughly excellent pictures has never before been seen in St. Louis, probably never anywhere in the West. We would suggest a visit to this department in the early hours of the day, as it is then less crowded and there is better opportunity for careful study of the pictures. Probably the two pictures which will leave the most vivid impressions upon the mind are the scene in the smithy where the older man has just stricken down his taunting companion, and the one entitled "L'Amour et Folie." We have heard with regard to the latter a suggestion that it should be bought by subscription and placed in the new hall of the Medico-Chirurgical Society. It was thought that this would be an eminently appropriate place for such an admirable study in anatomy, and that there would be comparatively little danger of it doing harm there, as physicians, of course, would study it without passion, simply from a professional standpoint.

Lawyers, Ministers and Doctors in the United States.—W. H. H. Russell states that in 1850 there were in the United States 23,939 lawyers, 26,842 clergymen and 40,564 doctors. In 1880 there were 64,137 lawyers, 64,698 clergymen and 85,671 doctors—in all 214,506. In the thirty years from 1850 to 1880 the professions more than doubled in membership. In 1850 there was one lawyer to 964 people, one clergyman to 864, and one doctor to 569. In 1880 one lawyer to 782 people, one clergyman to 775, and one doctor to 585.

Of the 64,137 lawyers in 1880 there were 75 women; of the 64,698 clergy there were 165 women; and of the 85,671 doctors there were 2,432 women.

Of the 214,506 professional workers 21,212 were over sixty years of age.—*N. Y. Med. Jour.*, August 22.

Dr. P. O. Hooper, of Little Rock, has just been appointed superintendent of the Arkansas State Insane Asylum at that place, vice Dr. C. C. Forbes, resigned.

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ORIGINAL ARTICLES.

THE INDUCTION OF PREMATURE LABOR IN CERTAIN CASES.

BY WALTER COLES, M. D.

[*Read before the St. Louis Obstetrical and Gynecological Society, Sept.* 17, 1885.]

THE induction of premature labor in certain cases is now regarded by all leading obstetricians as a perfectly legitimate and highly commendable procedure. And yet no operation in obstetrics has been more severely criticised or tardily adopted in the older civilized countries, unless we except England, where it originated, and even there it was discussed for a long time before it was put into practice. It is said by some, though not generally admitted, that it was first performed by Mary Donally, an obscure midwife, in 1738. The first authentic account of this operation, however, was the result of a formal consultation, held in London about the year 1756, it being put into successful practice shortly afterwards by Dr. McCauley. It was fifty years after this before the operation was recognized in Germany, and even as late as 1827 it was formally protested against by the French Academy. In 1831 it was performed for the first time in France by Prof. Stoltz, and with the "most perfect success."

Although we hold that there are cases where the condition of the mother may be such as to call for the induction of abortion as a *dernier ressort*—both the mother and child being doomed to perish when it is neglected—still this is not the class of cases that is intended to be considered in this paper, which refers rather to the induction of labor at a late period of pregnancy, when the operation is performed in the interest of both parent and offspring, or, in other words, after the seventh month, when the child may be considered viable.

This question is always one of grave responsibility, and should be discussed in a spirit of true conservatism. It presupposes a condition of things requiring decisive action, yet the line of policy to be pursued must be governed rather by sound discretion than cast-iron rules. The cardinal point to be borne in mind is that the operation is undertaken as a means of averting special dangers to the mother or child, generally both.

Although the child is considered viable at the end of seven months, it is still more liable to survive as the full period of pregnancy is approached. There is a strongly rooted popular fallacy that a seven-months child is more prone to live than one born at eight months, but of course we recognize the absurdity of such an idea, and naturally regard the child's chances of life as materially enhanced as it approaches maturity. Hence the induction of labor should always be postponed as long as the circumstances of the particular case will admit.

The indications for the induction of premature labor are quite numerous and varied. The mere mention of some of them will suffice, while others admit of more or less discussion. The first and most common is where there exists a disparity between the capacity of the pelvis and the size of the child. In a large majority of such cases the difficulty is with the mother, the dimensions of the pelvis being too small to admit of the passage of an ordinary fetal head at term: yet, by the anticipation of this event, labor may be accomplished with perfect safety to both mother and child, without even the aid of instruments. Again, the pelvis may be of ordinary capacity, or even above the average, and still the fetus may habitually attain extraordinary dimensions, so as to seriously jeopardize the life of the mother

and involve a sacrifice of the child. Sometimes both of the foregoing conditions of pelvic contraction and extraordinary fetal development may coexist.

As it does not often happen that these difficulties are recognized by the accoucheur in advance of the first labor, it is unfortunately true that many valuable lives are thus lost which might otherwise be saved. It is chiefly, therefore, after the peril of one confinement has been passed that the physician has an opportunity of improving the experience which previous events have demonstrated. Most obstetrical authorities hold that it is useless to undertake this operation with any promise of success when the shortest pelvic diameter falls below two and one-half inches. English obstetricians place the minimum limit at two and three-fourths inches. Some few deliveries have been accomplished where the diameter has been but two and one-fourth, and that limit has been mentioned by Tarnier and a few others, but it is evident this is not sufficient space to admit the passage of a viable child except with the rarest of exceptions. Whenever, therefore, the shortest diameter falls below two and three-fourths, or at least two and one-half inches, it is a case for craniotomy. For it must be borne in mind that the average fetal head at seven months measures in its bi-parietal diameter two and three-fourths inches, which is susceptible of a compression varying from one-fourth to half an inch. At seven and a half months the transverse diameter of the head measures three inches; at eight months three and three-sixteenths inches; at eight and a half months, three and three-eighths inches; at nine months from three and one-half to three and three-fourths inches. The degree of pelvic contraction must be our guide as to the time at which labor should be invoked. For, taking into consideration the measurements just mentioned, and making a fair allowance for compression of the cranial bones, we can form a tolerably correct estimate of the limits beyond which parturition at any given period would be possible.

Of course it must be understood that these figures are mere approximations which are liable to exceptions, for we have no means of ascertaining beforehand what the size or firmness of any particular head may be. This is especially the case in first

pregnancies, for, although the accoucheur may be aware of a slight pelvic contraction, he naturally shrinks from operative interference, hoping that by some good fortune labor may be effectually accomplished through the diminutive size and pliability of the fetal head. If, as is sometimes the case, this proves small and yielding, all may go well, but should the child be large and the head correspondingly developed, we at once encounter very serious difficulty, necessitating artificial delivery, and involving probably the life of the child, and possibly also that of the mother.

We believe that where due discretion is exercised the induction of premature labor should be resorted to in this class of cases with increasing frequency, offering, as it does, less hazard and suffering to the woman, and affording a far better chance to the child than forcible delivery by the forceps after a tedious labor, to say nothing of the risk of being compelled after all to resort to craniotomy. We can all recall many cases of this character, where women in successive labors have passed through great agony and peril with the loss of all or most of their children. In all such instances where the pelvic deformity is slight and the children have been found by experience to be large and vigorous at maturity, there can be no sort of question that the anticipation of the natural term of pregnancy by a few weeks would avoid much suffering and save many lives. The dread of such an operation in the minds either of the profession or laity is founded rather on theoretical than practical grounds, and when properly done, offers no extra hazard to the mother, while it affords every possible advantage to the child. Ossification in the fetus is greatly accelerated during the latter part of pregnancy, and the resistance of the head is correspondingly enhanced. As an example of what nature can do in this respect, it is only necessary to recall the fact that in birds and fowls the egg is covered with a hard shell within twenty-four hours, and although this is not altogether analogous to the point under discussion, yet it is a fact which has been observed in all cases of premature birth—even where nature is only anticipated by a few days—that the cranium is found to be decidedly more yielding. Hence Playfair remarks that a "week or a fortnight

might make all the difference between a labor of extreme severity and one of comparative ease."

In regard to the propriety of resorting to the induction of labor in primiparæ, Tarnier expresses himself in the following forcible manner. He says: "Many accoucheurs hold that in a first pregnancy premature labor ought not to be thought of when the pelvis has a diameter of more than three and three-eighths of an inch. Indeed, the fact that the woman is pregnant for the first time has been regarded as a formal contraindication of the operation. We shall state our own opinion the more freely on this subject, as we cannot understand why there should be any doubt about it. Premature artificial delivery is an innocent operation: how great, therefore, would be the regret if, after having waited until term, it became necessary to perform embryotomy upon a child which might have been saved by the former operation! In the interest, therefore, of the child itself, were it not better that it should encounter the inconvenience of a premature birth than the danger of a difficult delivery by the forceps? We would, therefore, in a case of first pregnancy, recommend premature delivery whenever we felt uncertain as to the result of labor at term, at the risk of being accused of having accomplished it unnecessarily: with much less hesitation, therefore, would we advise it when the pelvis is so contracted that labor at term would probably be very difficult or even impossible."

In this connection I am reminded of a remark made by one of the gentlemen who participated in the discussion at our last meeting, viz., that when opportunity offered he always "endeavored to examine his primiparous patients two months before confinement." At first sight this might seem to some as unnecessary, but when we reflect upon the importance to the female of the information to be thus derived, and which can be acquired in no other way, the proceeding appears in an altogether different light. It is the duty of the obstetrician to take a practical view of all things, and to run no unnecessary risks. No false modesty or diffidence should stand in the way when there is a possibility that a human life is at stake. Although such an examination might turn out to be needless in all save rarely excep-

tional cases, yet, if every woman could be made to understand that she might prove the exception, such a proposition, so far from seeming meddlesome in her sight, would strike her as of the most essential importance. It is to be hoped that the day will yet come when it will be considered the proper and customary thing for every female, pregnant for the first time, to consult her physician as to her physical fitness for the trial before her; in this way many malpositions might be corrected and pelvic deformities ascertained in time to avoid danger and possible death.

There is still another class of cases, already adverted to, which are occasionally encountered, where the propriety of the induction of premature labor should be taken into serious consideration. I allude to those cases wherein the pelvis is apparently normal, but where the child habitually proves to be of extraordinary size. I am quite sure that all of the gentlemen present can recall instances in their experience where this state of things has caused the death of the fetus in several successive labors in the same individual. For example, I know of a lady, the wife of a tobacconist residing on Geyer avenue in this city, who has been confined three times. She is rather above medium height and weight, the picture of physical health and with a capacious pelvis. She is some twenty-eight or thirty years of age. The husband's age is about fifty; he is five feet seven inches tall, thick set and powerfully built. The wife was attended in her first confinement by a skilful obstetrician, and after a most difficult labor was delivered by forceps of a still-born child weighing, in the nude state, fourteen pounds. In her second labor she had a similar experience and was delivered instrumentally with difficulty by a well-known midwife who is said to be quite expert with the forceps. This child was also born dead, and is said to have weighed eighteen pounds. The father informs me that there can be no mistake about this, for he weighed the child twice on two separate and reliable scales.

Being anxious for a living child and disheartened at his past experience, the husband resolved to have two physicians present at the third accouchment of his wife, so that in case of trouble they could assist each other. Dr. Atkinson and myself were engaged, and each of us informed of the two preceding labors.

We met together, talked the matter over, and concluded that inasmuch as the pelvis was capable of admitting the passage of an eighteen-pound child, we had every prospect of a happy termination of the case in hand. Labor came on suddenly with a rupture of the amnion, and I happened to be the first to reach the house. On making an examination I was horrified to find an enormous foot protruding from the vulva. Dr. Atkinson arrived in a few minutes and I hastily informed him of the situation. We lost no time in apprising the husband of the condition of affairs and gave it as our opinion that the chances of saving the child were very slight, indeed. We made every effort to turn by external manipulation, but in vain, and finally, when the buttocks descended, I stood ready to apply forceps to the head at the earliest possible moment. This proved impossible, however, for the head was arrested at the superior strait; the shoulders and arms were delivered with difficulty, and when this was accomplished, the vagina was filled by an immense neck, while the shoulders were jammed close up against the vulva. It was absolutely impossible for want of space to so manipulate the second blade as to get the forceps to lock. Delivery was finally completed at the expiration of an hour by continuous traction with the finger in the mouth. The child was dead of course, and weighed, naked, fourteen and a half pounds. This lady has not been pregnant since, but should she become so, I should unhesitatingly recommend the induction of labor at the eighth month, as the most certain means of securing her an easy labor and a living child.

Cases are occasionally met with in which tumors within the pelvis or within the abdomen and infringing on the entrance to the pelvis might call for the induction of premature labor; in which event the same general principles would apply as to the conditions already discussed.

The relation of this operation to the management of placenta previa is so fully recognized in practice as to preclude the necessity of further notice. We pass on therefore to the mention of many conditions of the mother's health in which the induction of premature labor might afford her great relief and save a child otherwise doomed to perish with her. Among these may

be mentioned persistent vomiting, chorea, anasarca arising from albuminuria, heart disease or other causes; ascites, certain diseases of the heart, lungs or liver; hydramnios; tensity of the abdomen—causing distressing pressure upon large blood vessels and other organs; aneurism, mania, convulsions, and in fact any disease or condition of the mother, "provided only"—as Playfair remarks—"we are convinced that the termination of pregnancy would give the patient relief, and that its continuance would involve serious danger.

It sometimes happens that the fetus dies *in utero* towards the latter end of successive pregnancies. When it is found that this is dependent upon degeneration of the placenta, it has been suggested by good authority that it would be well to anticipate these changes, and consequent death of the child, by the induction of premature labor, provided the period of viability has arrived. Should this proneness to placental degeneration be dependent upon syphilitic taint, however, which is very often the case, this procedure will be found of doubtful utility, for the reason that a syphilitic child when born prematurely would in all probability die under the best of care. Moreover, modern experience would indicate that the fetus can be more efficiently treated within the uterus than outside of it. I would, therefore, be slow to recommend the induction of premature labor in cases where there was a well grounded suspicion of syphilis, but rather depend upon vigorous medication directed to the mother's system, commencing early, with the hope of thus influencing the nutrition of the placenta.

In operating for the induction of premature labor the object in view is to excite normal physiological action in the uterus, with as little departure from natural conditions as possible. It has been in accordance with this idea that various methods have been advanced by their special advocates. Among these may be mentioned stimulation applied to the breasts, recommended by Frerichs and Scanzoni; various forms of vaginal tampon as practised by Hüter, Busch, Schoeller and Braun; the douche, introduced by Kiwisch and modified by Blot, Tyler Smith and others; carbonic acid jets into the cervix, as used by Scanzoni; dilatation of the cervix by tents as suggested by Kluge, and sub-

sequently by means of special instruments, such as the dilator of Busch, the spheno-siphon of Schnackenberg and the well-known rubber bags of Barnes. Then we have the various mechanical processes of intra-uterine stimulation; the detachment of the membranes accredited to Hamilton; the injection of small quantites of tar-water between the uterine walls and the amniotic sac, known as "Cohen's Method"; the introduction of bulbs, bougies, etc., into the uterus, as suggested by Krause, Simpson, Tarnier and others; in addition we have electricity, oxytocics and puncture of the membranes.

Some of the foregoing methods are more theoretical than practical, while others are not free from danger. They are all more or less uncertain as to the time required to bring on labor, though some are far more efficient than others. Among the earliest and most reliable is puncture of the membranes. This procedure is, however, not the safest for the child, especially in primiparæ, as the fetus is thus subjected to a maximum direct pressure by the uterine walls, a condition which is hazardous to its life, if the labor be at all prolonged. At the same time special circumstances may dictate this method in preference to others, as for example, in certain cases of placenta previa, when it is desirable to speedily contract the uterus and increase the energy of its action. This should not be done, however, prior to partial dilatation of the os, if the operation of turning is contemplated, in which case preference should be given to other measures tending to excite contractions and at the same time promoting dilatation without interfering with the integrity of the membranes. Perhaps the most objectionable of all the older methods of provoking labor is the administration of ergot and other oxytocics, for apart from their uncertainty they are now clearly recognized as absolutely dangerous.

Since this operation is called for mostly in cases of deformed pelvis, it will be found that some of the methods recommended are by no means easy of performance. If the brim is narrow, the uterus is high up and the os will be found pointing backwards and beyond the reach of the finger, so that it will require skilled assistance in order to successfully introduce tents or Barnes' dilators into the cervix. Even when the uterus is

steadied and pushed down from above, these manipulations will be found exceedingly difficult, and in some cases quite impossible without introducing the hand more or less completely into the vagina, under chloroform. It frequently happens that a Sims' speculum and a vulsellum prove of great service. Tamponing the vagina is very simple, but not by any means a certain method of inducing labor. The same may be said of douches; they frequently require to be often repeated, and may finally fail in the absence of other supplemental means. The injection of carbonic gas or of water into the uterus is conceded to be dangerous, a number of fatal cases having been reported by Depaul, Salmon, Simpson, Barnes and others; and in view of the fact that there are other methods of equal efficiency and involving less trouble, time and risk, they should be discarded. Barnes' rubber bags, or tents of tupelo or sponge, offer a valuable means of commencing dilatation of the cervix and stimulating uterine action. Instances have been recorded, however, in which the head of the child has been deflected by the presence of Barnes' dilator, producing a shoulder or breech presentation.

According to my own experience, the method of Simpson and Krause, which consists in the introduction of a gum bougie between the uterine wall and the amniotic sac, proves by far the safest and surest means of inducing labor. The bougie should be of large size, and slowly and carefully pushed up from four to eight inches, and allowed to remain *in situ*; the free end being wrapped in raw cotton and coiled up into the vagina. In this way it does not discommode the patient, who may be permitted to sit up or even walk around the room, if she so desires. The passage of a bougie as thus described is quite painful, and in sensitive patients it might have to be done under the influence of an anesthetic. Should the instrument happen to come in contact with the placenta, experience teaches that no serious bleeding results. If, as is sometimes the case, the amnion is ruptured in passing the bougie, it is not a matter of much regret, since the puncture usually occurs high up, and hence the escape of fluid will be slow, while at the same time it hastens labor. The superiority of this method consists in its simplicity, its efficiency and its freedom from all risk to either mother or

child; it has also the further advantage that it can, if necessary, be easily supplemented by any other means, such as dilatation of the cervix, the douche, or puncture of the membranes. On account of the uncertainty, trouble and risk attending the douche, however, especially when force is used, or the fluid is injected into the uterus, I prefer other methods and only employ it when the water has free exit, and under no circumstances would I feel safe in introducing the nozzle of the syringe further than necessary to have the stream, which should be continuous and gentle, come in contact with the membranes. When thus employed the douche may prove very efficient, and is highly commended as a means of inaugurating uterine contraction. The strong testimony against the douche, however, which has been recorded by many European authorities, such as Barnes, Playfair, Tarnier and others, should not be ignored, and I can only say that I have gotten along very well without it. The presence of a bougie will be found in no wise to prevent the passage of a tent or Barnes' dilator by its side into the cervix, and the two can thus remain and mutually assist each other.

In most of the cases in which I have employed the bougie, no additional measures have been required; in some, pains have commenced promptly and regularly from the moment of introduction, while in all instances labor has supervened within twenty-four hours. Instances are recorded, however, in which the uterus has proven extremely torpid in spite of a combination of three or more of the most approved methods.

Time is always an object in this operation, especially when the physician has to visit the patient at a distance. It is of equal importance that the woman be not discouraged and worn out by long continued efforts to attain the object in view. In order to encompass these ends, we would recommend *three* measures for the induction of premature labor in the order of their respective merits. 1st, *The bougie*; 2nd, *Tents or other dilators*; 3d, *The douche.*

I have induced premature labor, independent of cases of placenta previa, five times; twice with the same patient. In one case there was a breech presentation, and the child was still-born. Another child died during the first week. The remaining children survived and did well.

Case I.—Was somewhat remarkable in its history. Mrs. H. ——— an extremely emaciated lady, residing in Cincinnati, was taken by her husband to a watering place in West Virginia near Parkersburg, where I then resided. She had been examined by several physicians, and was said to have an ovarian tumor. The abdomen was enlarged, and contained a uniformly firm and rounded tumor, occupying a central position, and extending several inches above the umbilicus. The patient was suffering great distress in breathing, owing to the enlargement of her abdomen, and this was aggravated by extensive tubercular deposits in both lungs; in short she was in the last stage of phthisis.

Although a consultation in this case, held only two weeks previously, had decided that the abdominal tumor was ovarian or fibroid, it seemed strange when I saw the patient that there should be any doubt as to the diagnosis. The fetal heart was plainly heard; motion was distinct on palpation and also on inspection; even the outlines of the child could be readily made out through the attenuated abdominal walls. The patient, however, seems never to have suspected her true condition, she having attributed the cessation of her menses to ill health.

The dyspnea increased rapidly, and the patient and her friends began to intercede with me to bring on labor with a view of affording some relief. She was apparently past the seventh month of pregnancy, and it was plain to be seen that she could not survive to full term. At first I was disinclined to accede to the patient's earnest solicitations, but in a short time her condition became so desperate that something had to be done, and I consulted with Dr. R. P. Davis, and afterwards with Dr. A. G. Clark, of Parkersburg. These gentlemen both took the ground that as the mother was doomed in any event, we should give the child a chance for its life. After explaining all the risks our decision was eagerly accepted by the wretched patient and her friends.

A large gum bougie was passed six inches into the uterus by the side of the membranes at 10:30 A. M. Slight pains were immediately excited, and in six hours uterine contractions were vigorous and regular. At 8:30 P. M a living

child weighing four pounds was born after a remarkably easy and natural labor. The mother stood the ordeal better than any of us expected, and experienced the most perfect sense of relief; in fact her general improvement was very remarkable. For the first two weeks she gained in all respects; she slept well, her digestion, appetite and strength evinced great improvement. Unfortunately, at the end of three weeks however, she was seized with a diarrhea which quickly carried her off. Owing to the fact that the weather was cool and damp, and there being no means of heating the room, which was in a summer hotel, the child did not do well; it died in about a week.

CASE II.—Mrs. J. ——— had been in labor seventy-two hours with her first child, Dr. John Shickle, of Parkersburg, being in attendance, when I was called in. On making an examination, I found the head resting against the pubic arch which was very narrow, owing chiefly to the encroachment of the left ramus towards the median line. On making inquiry I learned that the right leg of the patient was several inches shorter than the left, it having been dislocated in childhood. The consequence was that the pelvis was pushed in on the left side—especially the left side of the pubic arch. Delivery was effected with difficulty, after perforation of the head, the child being very large. Although extremely exhausted, the patient made a good recovery, and within six months was again pregnant. I made a note of her reckoning and advised the induction of premature labor. In the meantime a consultation was held and the pelvis examined, which resulted in a decision to perform the operation at seven and a half months. When the proper time arrived, a bougie was passed into the uterus; in doing so, however, the membranes were accidentally ruptured. Labor came on in three hours, and, at the end of nine hours, a girl baby was born, which survived and grew up to be a bright and interesting child.

CASE III.—The same patient, Mrs. J., again became pregnant, and at the end of seven and a half months I brought on labor by the same method, only that the amnion was not ruptured in this case. The result, however, was not equally satisfactory; a vigorous male child presented by the breech and was suffocated before the head could be extracted.

Case IV.—Mrs. W., aged 19, pregnant with her first child, was attacked during the sixth month with violent chorea. The contortions of the patient were pitiable to behold. Such was the violence of the spasmodic action of all the voluntary muscles that it was difficult to feed the patient, and short interims of sleep were only procured by large doses of chloral. All efforts at motion so aggravated her suffering that she would pass her urine and feces in bed rather than exert herself in the least. Thus matters progressed until near the end of the eighth month, when it became evident that the patient would die unless relieved. She was much emaciated and covered with bed-sores and bruises. At the request of the family, the late Dr. John S. Moore was called in, and we decided to lose no time in bringing on labor. The patient was chloroformed and a large sized bougie passed seven inches into the uterus and left there. I should have been satisfied with this, but Dr. Moore suggested that while she was under the influence of the anesthetic it would be better to puncture the amnion in order to hasten labor. This was done by means of a stylet. Uterine contractions followed promptly and at the end of fifteen hours the patient was delivered, she being kept under the joint influence of chloral and chloroform during the latter part of labor. The child was reared without difficulty. The mother was kept quiet with chloral for thirty-six hours after delivery; for the first day there was some twitching of the limbs whenever she was aroused from sleep, but this subsided by the second day, and she made a good recovery.

Case V.—During the winter of the present year I received a letter from Dr. Robert J. Hornsby, of Bunker Hill, Illinois, informing me that a relative of his expected to be confined in June, and in view of the great difficulty encountered in two preceding labors, he desired me to be present if possible. At the same time I received the following history. Mrs. E. was confined with her first child some four years since; the labor proved very severe and protracted, and was finally terminated with great difficulty by forceps. The child was very large and born dead. After two years she again passed through the same ordeal with a like result. Both Dr. Hornsby and his associate, Dr. Gross, of Gillespie, attributed the difficulty to the unusually

large size of the children, and to a contracted pelvis, which is deep and narrow, with a short antero-posterior diameter at the brim. The patient having narrowly escaped with her life on the two former occasions, both she and her friends were extremely apprehensive in view of a repetition of the same peril. Besides, she was particularly anxious that the coming child might be born alive. Later in the spring Dr. Hornsby wrote me that the abdomen was of unusual size, indicating that the fetus was large.

After considering all the circumstances, I expressed the opinion that at full term I could not probably accomplish any more than had already been done by her skilful attendants, and as the patient resided fifty miles out of the city, I might not be able to reach her promptly. I therefore recommended the induction of labor at the end of the eighth month, which was agreed upon. The calculation was that labor would occur between the 5th and 10th of June. I accordingly arranged to operate on the 9th of May. I reached the patient's residence about 10:30 A. M. on that day, and a half hour afterwards passed a large sized gum bougie five inches into the uterus and allowed it to remain. Pains came on immediately and continued with regularity and increasing severity, so that by 4 P. M. the os was fully dilated, when I removed the bougie and ruptured the membranes; the pains were extremely efficient, and in less than three hours the child was born, and soon gladdened the mother's heart by its cries. The placenta and cord were of unusual size, giving every indication that had the full nine months elapsed, the fetus would have attained large dimensions. The mother in this case made a speedy recovery. A letter from her, dated August 9th, gives the subsequent history of the child, as the following extract will show:

"*Dear Friend:*—Your dear little girl is three months old today and I want to write to you and tell you how well, fat and sweet she is. We weighed her this morning, and she weighed fourteen pounds, just twice as much as when she was born." * *

In conclusion a word should be said in regard to the care of the child. A vigorous child, premature by only a few weeks, will get along nearly as well as one born at term. But if the in-

fant is feeble, or if born more than a month before its time, great care should be exercised to keep it warm, for its vitality is easily extinguished by cold. If possible a wet nurse should be provided until the mother's milk flows freely. No time should be consumed in bathing it; its body should be quickly sponged dry with a soft, warm towel or flannel, a diaper put on, and its body carefully wrapped in carded wool or cotton. It can then be placed in a basket or cradle and the temperature maintained by bottles or bags of hot water.

If desired, a very effectual contrivance for maintaining a uniform temperature may be manufactured by a tin-smith, consisting of two rectangular tin or sheet-iron pans. The smaller pan being two feet long, by from fifteen to twenty inches in width and six inches deep, is supported on four legs two inches long and placed in the outer receptacle, which should be four inches larger in all its dimensions. The intervening space can be filled with water which is kept in the neighborhood of 98°. The outer pan may be provided with a faucet by means of which the water may be drawn off and renewed whenever the temperature falls much below the required standard. While it is important to keep the temperature of the child up to the normal, it is equally dangerous to subject it to excessive heat. Young children are exceedingly sensitive to an inordinate temperature, and I have known it to prove fatal.

PHARMACY AS A PART OF A PHYSICIAN'S EDUCATION.

By O. A. Wall, Ph. G., M. D.

[*Read before the Medico-Chirurgical Society, May* 19, 1885.]

THE importance of pharmacy as a branch of education for the physician does not seem to be as generally appreciated by the medical profession as it deserves to be, and in consequence of this neglect of one of the fundamental branches of medical education there are conditions of relation between the

medical and pharmaceutical professions which belong to the vexed questions of the day.

It is not my purpose, however, to discuss any of these questions in this paper, but merely to urge that more interest should be taken by physicians in pharmacy.

The Pharmacopeia, a copy of which should be on the table in every physician's study, as a ready book of reference, is rarely studied by any member of the medical profession, and I have heard men, high in the profession, almost boastingly admit that they had never seen a copy of the book, much less studied it.

When we consider the intimate connection between the practitioner of medicine and pharmacy, such an admission should be almost as humiliating as one which we occasionally meet with, physicians boasting that they have not read a medical book or journal since they left college.

The neglect of the study of pharmacy brings with it a defective prescription writing which makes American physicians the laughing stock of men educated in European institutions, for we find that in some of our leading standard works on therapeutics, gynecology, practice of medicine, etc., there are found such flagrant transgressions against pharmaceutical properties, that we wonder how men so able in other lines can be so ignorant of this.

The careful study of the pharmacopeia, or, what is practically the same thing, of one of the dispensatories or commentaries on the pharmacopeia, makes the practitioner better acquainted with the tools of his calling, as it were; but it may as well be stated that it is a penny-wise, pound-foolish policy to buy second hand, superannuated copies of any of these works.

The general neglect of the profession in this regard is perhaps most clearly shown by the total failure on their part to use the elegant class of preparations introduced in the pharmacopeia of 1880, under the title of "Abstracts," which are a scientific and reliable substitute for the unsatisfactory, unreliable and variable "powdered extracts."

Here we have an example of pharmaceutical skill and knowledge offering for the use of the physician a more efficient and

reliable class of remedies than many others now in use, and yet none avail themselves of the advantage, because, as a class, the physicians choose to remain ignorant of pharmaceutical progress. Can or must the same be said in regard to any mechanical appliances, or to any modes of treatment other than by pharmaceutical measures? Or is there any other profession of which it can be said that the leading members, as well as the rank and file, are so totally indifferent to one of the most important aids to a proper practice of their calling?

Knowledge of pharmacy enlarges the armamentarium of the physician. It enables him to meet the ever-varying changes of disease by corresponding changes of the form of treatment.

It gives him the same advantage in regard to the fickle and capricious likes or dislikes of his patient that is possessed by the thrifty house-wife who, with a little corn-meal, butter, eggs and milk, knows how to serve a number of appetizing dishes, gruel, cakes, pudding, biscuits, etc., while another, with the same material, knows only how to make the one monotonous corn-bread, which, however good in itself, becomes disagreeable on account of the want of change. So that physician who, by virtue of his better pharmaceutical knowledge, avoids a prescription routine, is apt to be more successful in his treatment of disease, and therefore in his practice, than another who, with equal or perhaps superior diagnostic skill and more scientific attainments in other branches, is a less successful practitioner and therapeutist because he has neglected the study of pharmacy.

I would not be understood as saying that the physician should necessarily study *practical* pharmacy, or be personally expert in dispensing, although many physicians are so placed that this becomes almost a necessity to them, and it would certainly be a help to every one.

At the present time, and with our modern methods, a subdivision of labor is desirable, and the practice of pharmacy is properly and justly a separate calling or profession. But as pharmacy's main reason to be is to minister to the sick in accordance with the teachings and directions of medical science, it is necessary that the physician should know pharmacy in order to make full use of pharmaceutical knowledge for the benefit of his patients.

Occasionally, perhaps, the interest of the two professions seem to clash and interfere. Occasionally a member of one or the other will rush into print, and arrogate to his profession duties and functions belonging to the other; as when lately a pharmacist, in one of our leading pharmaceutical journals, claimed that the doses of the different preparations should be determined by druggists who, as he claimed, were more competent to do this than the physicians, since they knew better the composition of the preparation and its percentage strength of drug, forgetting, or never knowing, that a dozen and one other influences beside percentage strength, serve to determine the activity and dose, such as the form (solid or liquid), the menstruum (alcohol, water, etc.), the dilution (fluid extract, tincture, or infusion), the solubility in gastric or intestinal juice, the rapidity or slowness of absorption, the influence exercised by heat or cold in the process of manufacture, etc., and many other influences which may perhaps augment the action of a certain quantity of crude drug many times or reduce it in equal degree.

So the pharmacist who proposed the fixing of doses by pharmacists ignorantly assumed for his profession something which in the very nature of things they are utterly incompetent to do, and which must be left to the physicians to determine.

It would be equally out of place for the physicians to dictate the proper menstrua and processes for making the various preparations, the elegance, permanence and efficacy often depending on very nice determinations of proportions of which the physician, *as physician*, knows nothing.

Of course a physician may be a pharmacist, or vice versa, and be equally competent in either branch, and therefore entitled to speak from the standpoint of either profession. In such cases, however, what he has to say on pharmaceutical subjects is entitled to consideration because he writes as a pharmacist, and not as a physician, while he writes with a knowledge of a physician, and not of the pharmacist, on medical subjects.

The pharmacist's skill prepares isolated active principles, alkaloids, resins, etc.; makes extracts, fluid extracts, syrups, elixirs, pills, and the many other elegant preparations of which the physician can avail himself in his prescribing.

Now, it is to the best interest of the physician to become better acquainted with the wealth of knowledge added to the common store by the pharmacists.

Not all physicians, of course, are such poor pharmacists as that one who once told the writer that he would gladly specify his fluid extracts in his prescriptions, but he had learned the doses of some other manufacturer's fluid extracts and did not wish to unlearn them and learn the doses of a new list. This physician was astonished to learn that a fluid extract *if properly made* from equally good materials and equally competent pharmacists, would be the same from Maine to Oregon, and from Lake Itasca to the Gulf, because it would be made of the pharmacopeial strength of one cubic-centimetre of fluid extract from every gram of drug, or approximately, one minim from one grain.

In fact, the fluid extract, a distinctively American preparation, is the most valuable of all pharmaceutical preparations, because it has this definite relation to the drug, and because it contains the total active constituents of the drug it represents in a more perfectly assimilable form than in any other preparation.

We are sometimes told that one advantage of this preparation is that, knowing the dose of drug, we also know that of the fluid extract, and vice versa. This is only true within certain limits.

Of some vegetable bitters the dose of fluid extract is, perhaps, half a fluid ounce, while the dose of the powdered drug in the same case might not be more than one-fourth as much, and yet the activity of the powder is, proportionately, even less. But then the stomach may bear the fluid preparation while it would be irritated by the powdered drug in equal quantity, on account of the irritating woody cells or cell fragments. On the other hand, when the dose is small, as in narcotics, when the powdered drug is given in few-grain doses, the liquid preparation is often given in still smaller doses, because to absorb the active principles from the powder might take half an hour and the liquid could be absorbed in a few moments; in the latter case, perhaps, overwhelming the nervous system and producing alarming symptoms, when the use of the powder would produce only the legitimate effects of the drug.

And we must not forget the different liability to cumulative effect, according as we use liquid or solid forms of medicine.

While we see from this that the dose does not alone depend on the percentage of crude drug represented in the preparation, we also find that the fluid extracts are better adapted for medication than any other preparations, because they are uniform in character, readily prescribed and dispensed, will keep their medicinal virtues more perfectly and longer than any other form of the same medicine, and they can usually be combined with syrups or simple flavoring elixirs, so as to be quite palatable.

Many, perhaps most, of the advantages of the fluid extracts are offered by the "abstracts," these latter preparations having a definite percentage relation to the crude drugs from which they are made. They are made by totally exhausting the drug with a proper menstruum, adding a certain quantity of sugar of milk, varying according to the amount of extractive matter in the drug, and then evaporating to dryness. Then enough sugar of milk is added to make the product weigh just one-half as much as the crude drug weighed, and then finally powdering to an impalpable powder.

Abstracts are in fact powdered extracts of uniformly twice the strength and half the dose of the corresponding fluid extracts. They possess many pharmaceutical and a number of a therapeutical advantages over many other of the solid preparations of the same drugs.

For the prescriber the different relation of dose to the corresponding fluid extract (or to the drug itself), is important, for while each solid or powdered extract has a different relative dose, as compared with the fluid extract, the abstract is given in just half the dose, and it is almost instantly soluble, and therefore equally as absorbable a the fluid extract, it has the advantage that we may dispense it in capsules, therefore tasteless, while yet the action is usually delayed for only a very short period of time when it is given in this form.

Now, is it not a *testimonium paupertatis mentis* for physicians, that as valuable a suggestion from pharmacists as the introduction of "abstracts" officially through the pharmacopœia should have met with so little recognition that it is doubtful whether there are among us any who have ever prescribed them. Yet

abstracts ought completely to crowd out the inferior powdered extracts which are so frequently prescribed.

Pharmacy and pharmaceutical advances deserve more recognition than this. I am aware that there are individual pharmacists who discourage the introduction of any new medicine or form of medicine, because they might have to make or buy it and thereby increase their stock on hand instead of their bank account. But that is no reason why physicians should not avail themselves of all the advantages offered them by pharmacists as a class, or by any wholesale or retail manufacturing or dispensing pharmacist, individually.

And this leads me to say a few words on the rather delicate subject of the right or wrong of specifying certain pharmaceutical preparations of a proprietary or semi-proprietary nature, or even of specifying a certain brand or make of regular officinal preparations. Delicate, I say, because there are such widely divergent views held by the members of the medical and pharmaceutical professions.

First, then, in regard to specifying regular preparations of a certain make. If we admit that different men or firms may have better facilities than others to obtain, or greater knowledge to choose good drugs, and different degrees of knowledge and ability to prepare them, we must admit that the quality may vary. Just as one cook from similar materials will produce light bread and biscuits, tender steaks and delicious coffee; and another doughy, heavy bread, soggy biscuits with saleratus taste, tough and greasy steak, and muddy, bitter coffee; so the difference between ostensibly the same pharmaceutical preparations made by different men. Have we the right to choose the kind of food we will eat? Then have we not equally the right to choose the medicine we will take? I think we have. Pharmacy is perhaps the only profession the members of which, in their public utterances in their journals, proclaim the doctrine that all the members of their profession are equally competent and honest, and that the physician should not discriminate in the favor of any manufacturing pharmacist by specifying his preparations. Privately they will not only admit the contrary, but each one takes pains to call on the physicians in his neighborhood, supplying them

with prescription blanks and trying to impress them with an idea of his better qualifications to fill their prescriptions.

A paper by the writer of this, read at the American Pharmaceutical Association meeting at Milwaukee, last September, maintaining the physician's right to specify, was, like all other papers read there, printed in all, or nearly all, of the pharmaceutical journals of the country, in some with little or no comment, in most with adverse criticism, denying this right to physicians, and, as far as the writer learned, only one journal, the *Western Pharmacist*, of Chicago, had the independence to acknowledge that physicians had not only the right to so specify, but were careless of their own best interests if they failed to do so, when in their opinion the difference in quality demanded or justified it.

While some pharmacists admit the right of the physician to specify in cases of important drugs, as ergot or coca, they say it ought not to be done in cases of less important preparations. But who is to determine the importance in each case? If one maker makes a light dust-like and another a heavy granular Monsel's powder and we want to dust some over a bleeding surface, are we justified in preferring this light and dust-like when we can get it, or is it "*not important*?"

When we prescribe *anything*, are we entitled to demand that *that* shall be dispensed which we order, or not?

For instance, we prescribe an infusion of digitalis. Perhaps few physicians are aware that in many, very many, perhaps in most cases, the pharmacist simply dispenses fluid extract mixed with water. Now this is not an infusion, and the pharmacist does not follow the directions of the physician when he so dispenses.

Unfortunately, the digitalis kept by many pharmacists from year to year until all is used is often quite inert, and the fluid extract with water in most cases is perhaps vastly more efficient than the infusion, but we ought to be able to have fresh digitalis leaves infused in water when we so prescribe. I know one pharmacist, at least, in this city who, at the proper season, when a fresh crop of digitalis is obtainable, buys a new supply and throws away the old, because he knows the extreme liability of this drug

to become inert. But how few pharmacists are thus conscientious.

Sometimes peculiar or rare prescriptions are not filled properly because the pharmacist considers it merely a "notion" of the doctor, or he has not the prescribed articles and dispenses something else, similar, according to his ideas.

When we find that a dispensing pharmacist is incompetent or dishonest, have we not a right to refuse to allow our prescriptions to go to him? or, rather, have we not a right and duty to send the patient to some one whom we believe to be both competent and honest?

It is neither necessary nor pleasant to say "do not take this prescription to A," when the same result is obtained by saying, "I would prefer that you should have this compounded at B's drug store."

So when we have found from experience that the products of one or the other druggist (whether retail or manufacturing is immaterial), are superior to others in quality, materials, appearance, reliability or efficiency, why should we not be justified in specifying that man's make, either by using his blank in the case of the retail pharmacist, or by affixing name or initials to the preparation in our prescription in the case of the manufacturing pharmacist?

Our success in practice so largely depends on the quality of medicine dispensed in response to our prescriptions! certainly as physicians we should study pharmacy, and try to be able to judge of the quality of medicines by all their characteristics as well as by their therapeutical effects, and should avail ourselves by any and every possible means of all the advantages offered to us by pharmacy as a profession, or by individual members of that profession.

We want all the aid that pharmacy can give us, and any study we devote to this branch will pay for itself handsomely.

The Sanitary News is an invaluable paper to all who are interested in sanitary affairs. We are indebted to it for many notes and items of interest. It should be on the table of every health official in the country.

BRIGHT'S DISEASE.

BY DR. E. A. VOGT, CAPE GIRARDEAU, MO.

[*Read Before the S. E. Missouri Medical Society.*]

In the year 1827, Dr. Richard Bright was the first to point out the existence of certain morbid conditions of the kidneys, generally characterized by the presence of albumen in the urine, accompanied by dropsy, leading to fatal toxic effects, dependent on the accumulation of urinary principles in the blood; therefore these morbid conditions of the kidneys are embraced under the name of Bright's disease.

We speak now of acute and chronic Bright's disease.

A. Acute. Prof. Flint describes under this head:

1. Acute parenchymatous or interstitial nephritis (pyelitis) or inflammation of the renal parenchyma.

2. Nephritic colic.

3. Acute tubal nephritis, or acute albuminuria, or desquamative nephritis.

B. Chronic Bright's Disease.

1. Large white kidney, called so by Bright.

2. Hard, contracted kidney.

3. Fatty kidney.

4. Lardaceous, amyloid or waxy kidney.

M. Rayer has distinguished also four different Bright's diseases, according to the texture involved.

1. Nephritis, inflammation of the gland itself.

2. Pyelitis, inflammation of the pelvis and calyces.

3. Perinephritis, inflammation of the investing membrane.

4. Pyelonephritis, where both pelvis and glandular structure are affected.

Of nephritis he admits four different species:

1. Simple, of which there is an acute and chronic form.

2. Arthritic, comprising the pseudarthritics which occur in connection with gout and rheumatism.

3. Albuminous, which comprehends the granular alteration of the kidneys (really Bright's Disease).

4. Nephritis from morbid poisons such as attends typhoid fever, small-pox, scarlatina, Asiatic cholera, etc.

Of pyelitis also four species:

1. Simple. 2. Gonorrheal. 3. Calculous. 4. Verminous.

The diagnosis of these different Bright's diseases is often very difficult, if not impossible.

Da Costa gives the following signs for differentiation:

I. Cases in Which Dropsy is Urgent and Acute.

Acute desquamative or tubal nephritis, or acute dropsy from exposure, or after scarlet fever.	Dropsy extensive, usually febrile symptoms. Recoveries frequent; but disease may terminate in the large white kidney.	Urine deep colored, of high spec. gravity, containing much albumen, often blood, also casts covered with epithelium.	Kidneys enlarged and vascular, shedding their epithelium.

II. Cases in Which Dropsy is very Variable in Amount, Chronic and May be Absent.

Fatty kidney.	Persistent and obstinate dropsy, coming on gradually, face pale and puffed. Always fatal.	Urine contains much albumen, fatty casts, fat cells, free oil. Spec. grav. rather high, usually 1015 to 1030, rarely 1010. Quantity moderate or diminished.	Kidneys in a state of enlargement and fatty; have sometimes a mottled appearance.

III. Cases in Which Dropsy is Very Variable.

Waxy kidney.	Dropsy trifling, or entirely absent; great emaciation; striking sallowness of face; liver and spleen enlarged. Unfavorable prognosis.	Urine increased in quantity, contains much albumen, but comparatively few casts, which are pale and transparent. Spec. gravity varying, usually above 1010.	Kidneys enlarged, smooth and waxy looking.
Chronic contraction of the kidney.	Dropsy moderate, less than in fatty kidney, face sallow, yet not so much so as in waxy kidney. Often retention of urine; tendency to coma and to convulsions, impoverished blood. Liver may be cirrhosed; may exist for years without being suspected. Is a very chronic disease.	Urine more copious than in health; yet extremely small amount of albumen. Hyaline and large granular casts, altered epithelium; a little oil. Spec. gravity very low, rarely above 1010, much oftener below.	Kidneys waste slowly, are full of a deposit; become small, dense and contracted; the capsules very adherent; the thickness of the cortical substance diminished.

Bright's disease, as a special disease, and not taken as a generic term, includes only acute and chronic albuminuria or croupal nephritis after Niemeyer.

1. Acute albuminuria, nephritis desquamativa.

Symptoms.—Urine usually scanty, sometimes suppressed, contains albumen in great quantity, often also blood and always epithelial casts. Subcutaneous edema is a pretty constant symptom, first observed under the eyes.

Owing to the insufficient elimination of urea, uremia with its toxical effects upon the brain sets in: vomiting and purging may precede or follow: impaired vision and amaurosis are among the effects.

Complications are bronchitis, serous inflammations, especially pleuritis and pericarditis; pulmonary edema and hydrothorax may follow.

Both kidneys are alike affected.

As to the pathological character this affection is an acute inflammation of the membrane lining the convoluted tubes, and the prominent feature is the desquamation of the renal epithelium.

Johnson regards the secreting cells of the kidneys as the primary seat of the local morbid manifestations, these depending on an effort made by the cells to eliminate from the blood some abnormal products.

Morbid blood changes underlie the local affection.

The obstruction of the tubes and the loss of secreting cells lead to the transudation of blood serum, causing albuminuria, and to the deficient elimination of urea, causing uremic poisoning. The diminished density of the blood serum from the loss of albumen, together with the embarrassment of the capillary circulation from retention of urinary principles, occasions the dropsy.

Causation.—It occurs after or during acute skin diseases, as scarlatina (question whether chiefly from an agency pertaining intrinsically to scarlatina or from extrinsic causes, as cold). It is a sequel of diphtheria, small-pox, typhoid and typhus fever, erysipelas, measles, epidemic cholera, etc. It appears in pregnancy, in intemperate persons, and is caused by exposure to cold, or malarious influence.

Prognosis.—Generally favorable, sometimes fatal, through complications, as meningitis, pleuritis, peritonitis, pneumonitis and uremic convulsions.

Treatment is directed to the following objects:

1. Diminution of the intensity of the renal inflammation; pro-

motion of resolution and restoration of the secretory functions of the kidneys.

2. Diminution or removal of dropsical effusions.

3. Elimination of urea through the skin and gastro-intestinal nervous membrane.

The first is best secured by warmth and rest in bed with milk and water freely as main food and drink: by counter-irritation over the kidneys, by dry cupping or hot fomentations.

With reference to dropsy, infusion of herba digitalis with acetate of potassium or ammonia will be generally sufficient; elaterium may be sometimes necessary as a cathartic, but the main remedy is jaborandi or its alkaloid, pilocarpine. Diuretics are generally not admissible: they are, however, recommended as safe and useful by Christison, Bennet, Gairdner, Dickinson and others.

2. *Chronic Bright's Disease*, as described by Dr. Bright, embraces only the large white kidney; the other two forms he took for different modifications of diseased action.

Rokitansky described eight, Martin Solon five, and Rayer six different forms.

The large white kidney characterizes that form when the acute has preceded the chronic form of disease; here is general dropsy, increasing with the amount of albumen in the urine.

The albuminuria is persistent in Bright's disease and associated with general dropsy; albumen in urine alone is by no means distinctive, as it occurs in many other diseases, but only transiently and in small quantities.

In the case of contracted kidney there is generally *no* albumen in the urine and very little or no dropsy at all.

The quantity of urine voided varies much in different cases. It is generally less than in health, but sometimes is increased, especially in contracted kidney.

As a rule, the specific gravity is more or less diminished, and the amount of urea less also, in contracted kidney.

In certain cases, where there is no albumen, casts are found; and epithelial casts with albumen in the acute form, granular, fatty and hyaline or waxy casts are signs of the chronic form.

Indigestion or dyspeptic disorder is common; flatulency of the stomach, vomiting and purging.

Symptoms of disturbance of the nervous system are among the most important; pain in back, headache, neuralgic pains, vertigo, double vision, night blindness, myopia and presbyopia, obscurity of vision and amaurosis.

The ophthalmoscope detects hyperemia or congestion, points of ecchymosis and deposits of fatty matter.

Uremic poisoning, as manifested by delirium, coma and convulsions, occurs in Bright's disease with abundant general dropsy, but is more apt to occur in cases in which dropsy is wanting.

Cirrhosis of the liver and fatty liver are not infrequently associated with Bright's disease, not secondary to but concomitant with it.

Cardiac lesions, lesions of the valves, enlargement of heart are also found in Bright's disease; hypertrophy of the heart and valvular lesions occur especially in contracted kidney.

Chronic rheumatism is sometimes associated with Bright's disease; Todd and others have observed in gout contracted kidney, and called this form gouty kidney.

Lardaceous, amyloid and waxy kidney cases are very rare.

In cases of the large white kidney the affection is probably inflammatory, the chronic inflammation being seated within the uriniferous tubes.

In the hard, contracted kidney the newly formed fibrous tissue implies intertubular or intestinal chronic inflammation, as in cirrhosis of the liver.

In the fatty kidney fat is deposited as in other organs, probably in consequence of its undue accumulation in the blood.

The lardaceous deposit is probably a result of a poor blood change.

Causation.—Chronic Bright's disease seldom follows the acute form in children; it is also infrequent in old age; from 20 to 45 years more frequent. The large white kidney (Dickinson calls it chronic tubal nephritis) occurs especially in early life, contracted kidney in middle life. To determine with positiveness the particular form of chronic Bright's disease is not always possible.

The contracted kidney is most likely latent up to the development of the effects of uremic poisoning.

Intemperance, scrofulous and syphilitic cachexiæ, gout, chronic dysentery and various other diseases,as tuberculosis, variableness of temperature, all these may cause or accompany this disease.

Prognosis.—The different forms of chronic Bright's disease are all alike incurable; in the majority of cases the duration of the disease is from six to eight months.

Although recovery is not to be expected, not infrequently the progress of the disease seems to be stayed; and the prominent symptoms disappear for a time.

Treatment.—In chronic, as in acute Bright's disease, therapeutical indications relate to the general dropsy and uremia.

In general hydragogue cathartics, as elaterium, gamboge, bitartrate of potassa with jalap do better than diuretics; but often acetate of potassium or acetete of ammonia with digitalis and squills or spartium scoparium, parsley root, do very good service; also external application of hot infusion of digitalis.

Sudorifics are in place, also hot air baths, nitric acid, liquor ferri persulphatis or nitratis, iron and quinine.

Prof. Bartholow says that in uremia from desquamative nephritis or chronic parenchymatous nephritis, jaborandi is the main remedy.

Carpenter says in his Physiology: It is proved that albumen may present itself in the urine without any alteration of the structure of the kidney and, on the other hand, various forms of Bright's disease may exist, even in an advanced stage, without any albumen in the urine.

The albumen which is first taken up by absorption from the alimentary canal is distinguished by its proneness to transudation. (Mialhe calls this form of albumen albuminose.) It traverses organic membrane, albumen does not.

The failure of conversion of albuminose into albumen, which ought to take place as part of the assimilating process in the liver, is one cause of the readiness with which albuminous matter transudes from the blood in albuminuria and in dropsies; this albuminous matter frequently having rather the character of albuminose than of albumen.

The blood, which comes to the liver from the alimentary

canal, is charged with albuminous matter in a state different from that of the albumen in perfect blood, and the assimilation of this would appear to be one of the most important functions of the liver, as also the conversion of cane sugar to liver-sugar, perhaps also the formation of fibrine out of the albumen.

Albumen of the egg, if injected into the systemic blood current, finds its way out again by the urine as a foreign body, assimilation being required to give it the normal character of blood albumen.

It has been shown that any cause which produces congestion of the vessels of the kidneys, favors the passage of the normal albumen of the blood into the urine; and thus we see how albuminous urine may be produced by the repulsion of blood from the cutaneous surface to the kidneys, or by the determining influence of cantharides or other irritant diuretics; or by any obstruction to the return of blood from a capillary plexus by the renal veins. In far the larger proportion of cases, the pressure of an abnormal deposit would be exercised in impeding the venous rather than the arterial circulation in the kidney; and this would account for the very general presence of albumen in the urine in these morbid conditions of the kidney. But, on the other hand, the *arterial* current might sometimes be chiefly obstructed, so that there would be the very opposite to a state of congestion in the capillaries and Malphigian glomeruli, and in such cases no albumen is to be found.

According to Frerichs, not the urea itself in the blood brings on the toxic effects, but that urea is converted into carbonate of ammonia by the agency of a ferment; so that, however great may be the accumulation of urea, it does not give rise to serious consequences, unless this ferment is also present.

Dr. Lauder Brunton in *Practitioner*, June, 1877 related a case of albuminuria, which depended on indigestion; there was no edema; heart and liver normal, appetite poor; there was acidity of stomach and headache.

There was no history of acute nephritis, and the close connection between the digestion which was weak in the forenoon, the acid stomach and albumen in the urine in the forenoon and not in the afternoon, seemed to point to the indigestion as the chief cause of the albuminuria. There were no casts in the urine.

Then again the albuminous matter that appeared in the urine was probably not serum-albumen, because it only coagulated between 175° to 180° F., while the albumen in a case of true Bright's disease coagulated by 140° F.

Prof. Leube, of Erlangen, has demonstrated, by making some investigations concerning the presence of albumen in the urine of healthy persons, that in the majority of cases the urine of healthy persons is quite free from albumen, but it is comparatively frequent, if bodily exertion precedes the secretion of urine. Transitory albuminuria has been found in 51 out of 156 cases of delirium tremens by Weinberg; as there was found in no case any pathological element pointing to disease of the kidney, there remains no other explanation but that the symptom is due to alteration of innervation.

Dr. Hickerson read in 1880 a paper before the Moberly District Medical Association about a case of acute albuminuria in a pregnant woman who had eleven convulsions in one day, and her urine, being submitted to heat and nitric acid, presented one solid coagulum.

Acute albuminuria may sometimes appear, due to scarlatinous infection, and the symptoms of scarlatina be absent, as Dr. Perisher from Ladonia, Ind., reported to the *Medical Review*.

Prof. Tyson of Philadelphia gives in No. 19 of the *Medical Review*, in a lecture on malarial hematuria with albumen in the urine, a case of acute nephritis brought on by malarial poison.

The proof that blood is present is given by making hematin crystals. A little urine is mixed with a solution of potash; the phosphates with the blood pigment are precipitated. This precipitate is dried and reduced to a state of minute subdivision; a small portion of common salt is then thoroughly mixed with it and the mixture placed on a glass slide and covered with a thin glass cover. A drop of strong acetic acid is allowed to insinuate itself under the cover, and the slide is held over the flame of a spirit lamp until the acid is evaporated. The specimen is then allowed to cool and is examined under the microscope; there will be no difficulty in determining the presence of the little dark prisms of hydrochlorate of hematin which can only be produced from the coloring matter of blood.

Dr. Oliver has worked out an easy method of bedside urine-testing; he uses various test papers, pure filtering paper saturated with solutions, such as potassio-mercuric iodide, sodium tungsgate, potassium ferro-cyanide and picric acid for albumen and indigo-carmine for sugar.

Dr. Purdy of Chicago has tried these new tests and says they will detect serum albumen in more minute quantities than heat and nitric acid will; the most delicate are potassio-mercuric iodide and sodium tungstate, but to be entirely reliable the correcting influence of heat must be employed; and finally he says that the question of the near future as to albumen in urine is likely to be, not only is it present, but what quantity of albumen in urine constitutes a pathological condition.

G. Johnson, of King's College Hospital, prefers picric acid, and says: Mucin is contained in all normal urine and is precipitated both by mineral and vegetable acids.

Now, the tungstate of sodium and the potassio-mercuric iodide require the addition of either citre or acetic acid before they act as albumen precipitants, and they, one and all, by the reaction with mucin, slowly cause in most, if not all normal urines, a cloudiness more decided than that which results from acid alone. But with picric acid the case is different. In the form of a saturated aqueous solution and uncombined with any other agent it is a most delicate test for albumen and gives no precipitate in normal urine with mucin.

The only precipitates, other than albuminous, which may result from picric acid are urates, which rarely occur, except when the mixture is allowed to stand for a long time; also peptones, which, however, are exceedingly infrequent, and vegetable alkaloids, as quinine, if taken in large doses.

All these precipitates differ from an albuminous precipitate in the fact that they are readily and completely redissolved by heat.

That picric acid is a more sensitive test than nitric acid and heat, is proved by taking an albuminous specimen of urine and gradually diluting it up to a point where heat and nitric acid fail to give a reaction. At this point picric acid still gives a distinct reaction. With caustic potash picric acid is an infallible test for sugar also. Prof. Roberts (Manchester) gives his

opinion that heat and nitric acid are more to be relied on than any of the new tests.

The pathological and clinical significance of albuminuria has been occupying the attention of the Glasgow Pathological and Clinical Society. According to Dr. Newman: Along with the constituents of the urine albumen filters through the glomeruli, but is reabsorbed by the tubular epithelium when the kidney is healthy.

The principle causes of albuminuria resulting from organic lesions of the kidney are:

1. Increased tension in the glomeruli from whatever cause, arising either from increased efferent pressure or from undue efferent resistance.

2. Inflammatory or desquamative changes in the renal epithelium, the first causing an increase in the escape of albumen from the blood, and the second interfering with the proper absorption by the uriniferous tubules.

Dr. Granville referred to two groups of cases in which albumen frequently appears in the urine without organic lesions: First in young men, in whom the genito-spinal centre has been debilitated and preternaturally excited. A second class of cases included studious and sedentary men of middle age, who suffered from mental depression. In these cases albumen is often found alternating with sugar, suggesting the fact of nerve-centre disturbances.

Dr. Mahomed expatiated at length on this subject and stated: The first step is the existence of an acute or chronic form of blood-poisoning, either due to some definite poison, such as scarlatina, alcohol or lead or to the blood laden with excrementitious matters, as in gout or pregnancy.

This produces two results: A rise of blood-pressure from impeded capillary circulation throughout the body or a more or less severe functional hyperemia of the kidney. Chill, constipation or an excessive dose of the poison may now determine an acute inflammation of the kidney, and the structural changes may produce albuminuria by obstructing the circulation through the tubular plexus.

Dr. Finlayson referred to the power of organic and mineral poisons to produce albuminuria.

As for the albuminuria in pregnancy he thought it was not altogether to be explained by pressure, as it frequently appeared in the early stages when pressure could not exist, and in other cases when the fetus had died, the albumen disappeared. A new factor in the production of chronic Bright's disease has been elicited by Féré, who shows that procidentia uteri is almost invariably followed by chronic renal disease.

The observations of Pozzi on the influence of uterine fibromata are very similar. Henoch has shown that nephritis may follow varicella. Strangulated hernia is also associated with albuminuria, and bears a proportional relation to the amount of injury sustained by the intestines.

Dr. I. E. Atkinson, of the university of Maryland, has studied the relationship of Bright's disease and malarial fevers and reaches the following conclusions:

1. Transitory albuminuria is not uncommon in the course of malarial fevers, and is due to the intense visceral congestion, characteristic of these affections. It only may endure throughout the height of the congestion, recurring with each return of this, or it may persist in the intervals, in which event a higher grade of congestion is attained, more nearly approaching a condition of acute inflammation.

2. In a proportion of cases, varying with locality and type of prevailing epidemic or individual conditions, inflammation of the kidney occurs accompanied by dropsy and the usual symptoms of nephritis.

3. The usual form of malarial nephritis is the tubular diffuse variety. In this the inflammation seems to be most intense in the vicinity of the glomeruli.

4 Contracted kidney may occur as an advanced stage of malarial nephritis, either from long continued or frequently repeated attacks of malarial fevers or from fibrotic changes, such as may ultimately occur in ordinary tubal or diffuse nephritis. It is altogether improbable that this form of malarial renal disease ever occurs primarily, as pure interstitial nephritis.

These changes may be induced by any form of malarial fevers, though they more commonly follow chronic intermittent fevers.

6. The tendency of malarial inflammation of the kidney is

toward recovery; but from the persistence of impaludism or the intensity of the inflammation structural changes may be produced that are characteristic of chronic Bright's disease, when the gravity of the affection will be as that from chronic disease from whatever cause.

7. Treatment should be directed primarily against the malarial intoxication, more especially in recent cases. A correction of this will be followed often by a complete though gradual subsidence of the nephritis. Even in more advanced chronic cases the malarial factor in the process should be destroyed, if possible, after which the disease should be treated as ordinary Bright's disease.

The study of albuminuria will unquestionably be advanced by the united efforts of the various workers of the collective investigations of the British Medical Association.

The study has of late excited more than usual interest on account of the fact that a certain quantity of albumen has been shown to be present in the urine during the activity of certain functions as well as after violent exercise.

Moreover, a writer in an English journal leads us to infer that it is a constant associate of masturbation, or rather, when a rachitic child develops albuminuria, masturbation may be inferred.

The following questions to be answered:

Case I.—1. What circumstances led led to its detection? Pregnant woman of 19 years had eclampsia for three days and nights; urine suppressed; little drawn by catheter gave sign of albumen.

2. By what tests was its presence demonstrated? By nitric acid and heat.

3. What was its approximate amount? About 80 per cent.

4. Duration of albuminuria? About one week; by and by lessening.

5. Was it constant or intermittent? Constant.

6. If intermittent, what circumstances, if any, appeared to determine or favor its appearance?

7. Was the person robust or delicate? Robust.

8. Has he or she always been so? Yes, always.

9. Have there been other ailments? If so what were they? Yes, convulsions.

10. Was the individual of active or sedentary habits? Active.

11. If a female, had she borne children previously? If so, how many? Primipara.

12. Could the albuminuria be traced in any way to pregnancy? Yes, the only cause.

13. Was the person addicted to any injurious habit? Not that I know of.

14. Did the albuminuria bear any relation to food, to exposure, to cold or to bathing? No.

15. Is there any family history of gout or Bright's disease? No.

16. Had the patient previously suffered from scarlet fever? If so, at what age? No. Was it followed, then, by albuminuria?

17. What was the subsequent history of the case? Was delivered of a dead child and got better in about fourteen days. Could do her work.

18. Note especially the nature of any diseases, whether at any time there was dropsy or any other symptom of Bright's disease, and the cause of death if it has occurred? Treatment: Chloroform inhalations, venesections, bromide of potass., ergot and jaborandi.

19. If the subject remained in good health, state the length of time he was under observation? One and a half years after that sickness, was well and had another child without any trouble.

CASE II.—A strong man, blacksmith by trade, 36 years old, had swelling in the face, pain in back, stiffness in limbs, vomiting and gurgling sometimes, face looks sallow; urine examined by nitric acid and heat, about 50 per cent. albumen, and epithelial casts. Treatment: Inf. digital., kali acet., jaborandi, hot bath. Recovery; well for two years.

Disease returned. Dropsy general, urine suppressed. Dry cupping, hot fomentations over region of kidneys. Jaborandi, digitalis, kali acet., acid. nitric., liq. ferri nitrat., all tried, but no change; died after four weeks in bed, but had albuminuria may be six months before.

Cause of death: Heart failure and dyspnea.

CASE III.—Woman, married, had one child one and a half

years old. Dropsy general, but mostly abdominal. Urine tested by nitric acid and heat, contained from 50 to 60 per cent. albumen; has been in bed for at least six or seven months, emaciated, no appetite, urine more or less suppressed, heart valves defective. Rheumatism the cause. Treatment: Digitalis, squills, kali acet., jaborandi, nitro-muriat. acid. Acupuncture of abdomen several times. Got better in four months but was anemic and weak yet: had one year after that another child, and so far as I know is well yet.

Case IV.—Child, girl two and half years old; acute nephritis. Urine suppressed, bloody, tested by heat and nitric acid; 50 per cent. albumen. Cries when passing water, only one-half pint in twenty-four hours, and at a time about a half ounce. Warm bath and hot embrocations over kidney region. Emulsion of cannabis first, milk as drink, and main food; then lycopodium with uva ursi. These did no good; then jaborandi with digitalis, which was continued fourteen days, diminishing the albumen and promoting sweating and free diuresis.

Case V.—Farmer about 36 years old. Suffering for years from intermittent fever and congestion of liver and spleen. Dropsy, especially in face, abdomen and pericardium. Sick now for four months, but getting stronger and out of bed since one month. In the morning after good rest in night, no dropsy to be seen outwards, but in the afternoon, and especially towards night, hands and feet swollen, face bloated; breathing heavy, heart beats faster, about 110. No fever, temperature not higher, appetite good; urine passed freely, no albumen, but urea diminished, can find only very few casts, but sugar by Trommer's test.

Diagnosis, fatty degeneration of liver and kidney?

Hypodermic Morphine vs. Hanging.—F. H. Gerrish advocates the hypodermic administration of morphine instead of hanging as a means of inflicting capital punishment instead of hanging, claiming as advantages for this mode of punishment the following: (1) its certainty; (2) its painlessness; (3) its freedom from the chance of horrible displays; (4) the reduction of the dramatic element to a minimum; (5) its inexpensiveness.—*Boston Med. and Surg. Jour.*, Sept. 17, 1885.

CASES FROM PRACTICE.

A CASE OF DIABETIC COMA.

BY F. D. RATHBUN, M. D., NEW WINDSOR, ILL.

MISS F. L., æt. 22, consulted me August 26, 1885, stating that she had not menstruated for three months and was losing flesh rapidly. She also said she was passing an unusually large quantity of urine, and suffered greatly from thirst. Appetite good, but not voracious. At my request she measured the quantity of urine passed during twenty-four hours, and brought me a specimen, August 31st. The amount passed in twenty-four hours, was twelve pints, specific gravity 1040, reaction slightly acid; abundance of sugar, but no albumen. After visiting me August 31st, there was no alteration in her symptoms, until September 3d, about 4 P. M. She suddenly began complaining of intense pain in the hypogastric region, accompanied by deep, labored and rapid respirations. I saw her about midnight. At this time she was still suffering greatly with pain,which seemed of a neuralgic character, changing from point to point, sometimes being located in the lumbar, subclavicular, hypochondriac and epigastric regions. Respiration 32 to the minute, deep and labored. Pulse small, counting 120 to the minute. Extremities and surface cold. Eyes partially closed, countenance apathetic, sordes on the teeth. No cyanosis. There were no physical signs of pulmonary trouble. When spoken to she would answer questions rationally. She complained of the labored breathing, saying she wished that I could do something to relieve it. She also, when questioned, said that her head ached. Pupils were normal and reacted to light. No difficulty in swallowing; some nausea, but no vomiting. She had passed urine twice since four o'clock. September 4th, at 8 A. M., she was placed in a warm, wet pack, producing free diaphoresis, and urine was voided freely at this time. After being removed from the pack,

there was no improvement in her symptoms, except that her surface and extremities were warm and moist, and remained so during the day. She had been gradually becoming more and more comatose during the after part of the night, but could still answer questions by yes and no. Urine was again passed at 9 A. M. I left her at 10 A. M., returning at 5 P. M. Her condition was gradually growing worse, pulse weaker, coma profound, swallowing difficult, pupils contracted and not reacting to light, respiration 24, deep and labored. No tracheal rales and no cyanosis. She gradually grew worse, until at 1 A. M., September 5th, she died without a struggle, having lived about thirty-three hours from the onset of the violent symptoms.

Coma occurring without previous knowledge of the patient's having diabetes, presents a difficult problem in diagnosis. The symptoms, however, present certain characteristics that will materially aid in distinguishing it from comatose conditions arising from other causes. These are, 1. Pain. This is one of the earliest and most prominent symptoms. It is of a severe, agonizing character, rapidly changing from point to point of the thorax and abdomen. 2. Alteration in the character of the respirations. This is also an early symptom, and occurred in the above case at about the same time with the pain, and before the onset of coma. The respirations are rapid, and deeply drawn, without stertor, the patient breathing as if in a rarified atmosphere. 3. The absence of cyanosis despite the character of the respirations and frequency of the pulse. 4. The large amount of urine passed during the attack. 5. The gradual increase of coma until it becomes profound. 6. Convulsions occurring (if at all) just before death. When the symptoms above enumerated co-exist, and examination of the urine reveals the presence of sugar, the diagnosis will be confirmed. The urine will also, it is said, turn of a dark, vinous, red color, on the addition of per-chloride of iron.

PUERPERAL THROMBOSIS AND EMBOLISM.

By J. W. Lightner, M. D., Napoleon, Mo.

Although to Virchow belongs the honor of the discovery and description of thrombosis and embolism and their pathological conditions, it was the late Sir James Y. Simpson who, in an essay

in 1854, described them as lesions of the puerperal state. Many writers have made contributions on this subject, giving details of cases, and showing this to be one of the important diseases of the lying-in-room. Undoubtedly many cases of puerperal thrombosis and embolism are disposed of in the reports of cases under the heads of cardiac failure, congestion of the brain and lungs, etc. The following case, which occurred in my practice, although no post-mortem was allowed, was sufficiently plain to make a positive diagnosis.

Mrs. F., æt. 25, primipara; labor commenced August 8th. As I was absent from town, she was attended by an experienced nurse. On my return I was called to see the patient and was informed by the nurse "that the child was born about an hour previous to my arrival, but the after-birth had not been expelled." I easily expressed it, and as there had been considerable hemorrhage gave fluid extract of ergot. The uterus contracted nicely, and I left the patient about 10 P. M., resting comfortably, and doing well. Before I could see the patient next morning I was called away and did not get back until noon, when I was summoned to come immediately, as Mrs. F. had convulsions and they thought she was dying. On entering the room I found the patient gasping for breath. I was informed by the husband that she had slept well during the night, had eaten her breakfast and was feeling so well that she had insisted on having her clothing changed. They had done this and she had seemed to feel no bad effects from it. Just as she was about to eat her dinner, she suddenly uttered a loud cry, saying she was dying. The patient's left pulse was 140 and very weak. I gave her several hypodermic injections of digitalis, brandy and ammonia, as she could not swallow. The pupil of the right eye was largely dilated, the left normal. On examining the right pulse I was surprised to find it a great deal stronger than the left. In fact, it was full and bounding. On comparison with the left the most marked difference existed.

The uterus was contracted well. There had been no hemorrhage since I last saw her. There was total paralysis of the left side. That I had a case of thrombosis and embolism to deal with I was now satisfied. My effort to tide the patient over the attack was in vain. She expired about 3 P. M. the same day. That the premature changing of the patient's clothing, and her exertions at that time, as the nurse told me that she raised herself up without as-

sistance, although she remonstrated with her for doing so, following upon a right copious hemorrhage that had occurred just after the birth of the child, was the immediate cause of the thrombosis I fully believe. That there was a clot in the left side of the brain, as shown by the dilatation of the right pupil and the paralysis of the left side; also pulmonary thrombosis as the gasping respiration indicated and the marked difference in the right and left pulse, completed the diagnosis. The inability of the patient to swallow left me only the hypodermic and rectal injections by which to administer remedies. This made the case more hopeless and dissolution more speedy.

Bacteriotherapy.—The latest phase of study and experimentation concerning bacteria is that presented by Prof. Cantani, of Naples, who has made use of the well-known antagonism between certain forms of bacteria in cultures to make a startling experiment in therapeutics.

He first experimented with the bacterium termo, and ascertained to his entire satisfaction that it is harmless when injected under the skin, or inhaled into the lungs, or taken into the stomach. He then administered inhalations of a spray of a pure culture of bacterium termo to a patient with phthisis, having a large cavity in the left upper lobe, high fever and copious expectoration containing elastic fibres and numerous tubercle bacilli. Animals inoculated with the sputum became tuberculous. The case was growing worse continually, and all the usual modes of treatment had failed. The new treatment was commenced May 4. The amount of expectoration was rapidly reduced, and the number of tubercle bacilli was diminished, the fever abated and the general condition of the patient was ameliorated. June 1, tubercle bacilli could no longer be found in the sputa.

How far the antagonism between the different varieties of bacteria can be utilized for the destruction of those which are prejudicial to the human system can only be told by further experimentation. Certainly the result so obtained by Prof. Cantani indicates that there is a field for such investigation.

Chicago Post Office.—According to the *Sanitary News* this building is in a wretched sanitary condition, water closets, washbowls and urinals being out of order, untrapped and broken.

EDITORIAL.

CANCER.

Many of the ablest thinkers and writers of the medical profession have given their best thoughts and most careful writing to the study of cancer, as to its pathology, etiology and treatment, and still there is great diversity of opinion among them on all these points.

A very valuable contribution to the subject is found in a little monograph recently issued from the press of G. P. Putnam's Sons, containing the results of more than half a century of professional observation by the late Dr. Willard Parker[1]. He regards the formation of cancer cells as a process of malassimilation, and says: "The fact that cancer has always, for a greater or less length of time, a merely local manifestation, only shows that the tissues of the part are the essential factors of the diseased growth. Moreover, we never have a primary formation of cancer except in an organ whose function has been impaired or perverted."

Some of the statistics which he derived from a study of the three hundred and ninety-seven cases he has observed are of interest.

Of this number there were:—

Married,	253
Widows,	89
Single,	55

1. Cancer: A study of three hundred and ninety-seven cases of cancer of the female breast, with clinical observations by Willard Parker, M. D. *New York and London: G. P. Putnam's Sons.* 1885. 8vo., pp. 106; cloth. (St. Louis, J. H. Chambers & Co.,)

Of the married and widows, 342 in all:—

58 never had a child,
37 had but one child,
240 had two or more children,
7 there is no record.

The parts involved were:

The left breast alone	189
The right breast alone,	174
Both breasts,	14
Not recorded.	20

As to the age at which the cancerous development occurred it was impossible to secure accurate data in thirty-eight cases. In the remaining three hundred and fifty-nine the disease commenced as follows:

Between 25 and 30 years in 5 cases,
" 30 " 35 " in 23 "
" 35 " 40 " in 54 "
" 40 " 45 " in 78 "
" 45 " 50 " in 80 "
" 50 " 55 " in 57 "
" 55 " 60 " in 31 "
" 60 " 65 " in 12 "
" 65 " 70 " in 14 "
" 70 " 80 " in 5 "

Of 178 cases in which it was possible to estimate with a reasonable approximation to accuracy, the duration was 3.38 years. In 100 of these cases the tumor was removed with the knife. In these the duration was 3.54 years. In the seventy-eight cases from which the tumor was not removed by operation the average duration was 3.22 years. The greatest number of deaths occur during the second year of the cancerous development.

With regard to the menopause the malignant growth developed:

Before the menopause in	189 cases,
At " " in	84 "
After " " in	80 "
Not recorded	44 "

For causes he thinks we must look among influences which pre-

vail in civilized communities and are absent among barbarous or uncivilized communities. He remarks: "Cancer is the most prevalent among people that are in the habit of living generously, and, as far as my observation has gone, among those individuals who are most addicted to luxurious habits, other things being equal, and more particularly those who are in the habit of eating highly seasoned food, and who are more are less troubled with mal-assimilation, and consequent sympathetic irritation of the skin and mucous membranes."

While it cannot be positively demonstrated that anxiety, care, trouble and sorrow alone can so disturb the relation between nervous and cellular elements as to make the latter take on a cancerous development, yet he thinks that facts observed render this extremely probable.

With regard to the question of heredity Dr. Parker thinks its importance has been overestimated. This subject is of so much importance that we shall quote pretty freely from our author. "The strongest advocates of heredity claim that it is associated with 'cancer relatives' in only one-third of the cases. How are those cases which are not transmitted (if any are transmitted) acquired? Certainly in the habits and circumstances of the patients. Now if one-half of the cases may be acquired, all may. Note that we have here a question entirely different from that of the transmission of tubercle. A tubercular patient usually begets a child with a perceptibly marked strumous constitution. If the exceptions to this rule were as frequent as they are in cancer, it would be difficult or impossible, even in this disease, to trace heredity, although (and this is not the case in cancer) a constitutional tendency is early manifested." * * * * "What is the importance, as an evidence of heredity, of the fact that in a certain circle of a surgeon's practice he finds one third of his cases of cancer connected with other cases by blood relationship? Its importance is overestimated by reason of a simple numerical fallacy which is generally overlooked in the argument. * * * Assuming

that the average number of children of a married pair is four, then, in the families of immediate parents there would be eight individuals who must be counted as relatives. Every person would thus count among the families of their four grandparents, on an average, sixteen individuals, and the generation of the eight great-grandparents would number, in the same proportion, thirty-two. In the fourth remove the number would be sixty-four, and in the fifth one hundred and twenty-eight. Adding these numbers together gives two hundred and forty-eight persons involved in the comparatively direct family connection of one person in the fifth degree of ascent. If we include only four generations, that from the families of great-grandparents, the number involved will be one hundred and twenty, and by including the descending relationships from these, the number would reach several hundreds.

"Now, according to reliable statistics, the proportion of deaths from cancer to that of all other diseases is about one in one-hundred and twenty-five. Therefore it would seem to be quite in accordance with the laws of chance that there should often be found—certainly as often as once in three times—a person who could count one or more cases of cancer in the families of ancestors and blood relatives for three or four generations back."

Other arguments are also added to show that heredity cannot be regarded as a potent factor in etiology.

Neither does Dr. Parker believe that climate or geographical situation can be regarded as having an active influence in causing this disease.

He holds that the tissues must have undergone some unknown transformation in order to permit the possibility of cancerous development. The circumstances which conduce to this result are: (1) luxurious living, especially excess of animal food; (2), local irritation of an epithelial surface, as the pressure for a great length of time against the breast of the point of the corset, especially if the gland has been irritated by disordered function or inflammation; (3) mental affliction; (4) dysmenorrhea and other uterine irregularities.

He concludes the paper with practical suggestions as to treatment obviously dependent upon the views already noted as to etiology.

"Avoid the so-called predisposing causes, i. e., unnecessary luxury in modes of life. Especially abstain from eating food rich in nitrogen; urge your patient to take sufficient exercise; point out to her the necessity of cleanliness, and of avoiding all articles of dress that would induce irritation of the skin by pressure. Persuade her to cultivate cheerfulness of disposition and regulate her various functions, particularly that of menstruation." He strongly favors the early and thorough removal of the cancerous growth as soon as it can be recognized, but thinks the surgeon cannot rest satisfied with operating. He must seek to change the diathesis and modify the patient's constitution so that it will be no longer prone to reproduce the disease.

ON TERPINE.

M. R. Lepine communicates to the *Lyon Médicale*, August 9, 1885, the result of his observation on the use of terpine. He has now had considerable experience in the use of this drug and he finds more and more the importance of regulating carefully the dose of the remedy on account of the different effects produced by large and small doses. In a small dose of twenty to forty centigr. (three to six grains) the effect of terpine in cases of bronchitis is only to liquefy and consequently to facilitate expectoration. In a triple or quadruple dose, in the same patients the opposite effect is produced. The terpine, at the same time that it modifies the bronchial secretion, tends rather to diminish the quantity of the expectoration. In general it is not best, he thinks, to commence with a large dose; relief and cure are best secured by first liquefying the secretion.

It is exactly the same with the action of terpine upon the kidneys. A patient affected with nephritis will urinate noticeably

more with doses of thirty or forty centigrammes (four to six grains) but will experience a diminution of the diuresis if the dose is increased to more than a gram (fifteen grains). Terpine is diuretic, but only in a small dose.

A proof that in large doses terpine diminishes the urinary secretion is found in the fact that healthy dogs into whose veins is injected fifty to sixty c. c. (℥j—℥jss) of water saturated with terpine per kilogramme (two and three-fourths pounds) of weight, *i. e.*, a really enormous quantity of liquid, urinate only a few c. c. during the two days following this operation, while they eliminate rapidly simple salt water injected into the blood.

The stimulating and liquefying action of a small dose of terpine upon the bronchial secretion never is absent; the diuretic action of a simple dose often fails. This is not at all surprising, as the mechanism of the renal secretion is much more complex than that of the bronchial secretion.

PROVISION FOR OUR INSANE.

The *Boston Medical and Surgical Journal* discusses editorially, in its issue for September 10, the question of "The Increase of Insanity and Its Inadequate Treatment," starting with some statistics published shortly before that in the *Boston Daily Advertiser*, together with some comments on the treatment of the insane in the State hospitals.

According to this article the increase in the known number of insane during the last decade approximates forty per cent., a portion of this increase being due to the fact that a larger proportion of the insane than formerly now come under official notice. The lay editor in the course of his comments raises the question whether "these asylums are not really mere places of detention instead of hospitals."

The comment of the *Journal* upon the condition of affairs in Massachusetts are so apposite to that existing in our own state and city that we quote at some length:

"There is much force in this criticism, and we feel strongly that even the poor insane, who are not manifestly incurable, should have a hospital where each case could be better individualized, where their support should be more above a pauper standard, and where they would not be subjected to that blight of hopelessness which is bound, in some degree, to pervade an institution where the overwhelming majority of patients are manifestly incurable."

The writer says the more conspicuous evils of the insane "are an overcrowding and a lack of classification that render proper hospital organization impossible." He adds, "We speak in moderation of what is known to have been the condition of the Danvers Hospital for more than a year past, when we say that, in spite of most excellent management on the part of the physicians, it has been a disgrace to the commonwealth. This hospital receives a much larger number of new cases than any other in the state, and is equalled, in this respect, by very few in the world. It, therefore, cannot properly bear even a slight crowding that might not seriously inconvenience an unchanging chronic population. But the fact has been that, during the time mentioned, the number of patients has been so great that from one hundred to nearly two hundred have been obliged to occupy beds placed upon the floors of the wards at night, and to suffer corresponding inconveniences by day; personal privacy has been interfered with; proper classification has been made impossible; attendants and physicians have been wearied, and their time has been consumed in meeting unnecessary difficulties. Moreover, the patient who has been sent to the hospital 'for rest and quiet,' has the daily routine of his life filled with annoyances and irritations as preliminary to all treatment." * * *

"It probably is true that many of the patients sent there bear these troubles easily, either because they are too much demented to appreciate them, because they have not been accustomed to comfortable homes, or because they belong to the less disturbed class of patients, who are not likely to irritate one another, and who are able to adapt themselves to circumstances very much like sane peo-

ple. But this does not lessen the suffering and injury of those who are appreciative and excitable, as is the case with a large proportion of those who present the best prospect of restoration to health, and to whom the treatment of a hospital can be most valuable. It is a disgrace to the state that the officers of its hospitals are obliged to state that they have no place where these patients can receive the care and treatment which their condition demands.

"That this evil exists as it does is not wholly a necessity arising from the increased number of the insane, but is partly due to a lack of any system of selection of cases which need the special structural provisions of our hospitals for the insane for treatment in them, and of proper provisions for those who do not, elsewhere. The function which the lunatic hospital is now made to perform is not only that of caring for those who are dangerous to society, and furnishing remedial treatment for mental disease, but it is used as a convenient dumping ground for all classes of degenerative nervous disease attended with mental failure, which are disagreeable to care for elsewhere, or whose care costs more than $3.25 per week. This class is very large in the crowded population of eastern Massachusetts, and if all the feeble, broken-down cases, not needing other care and nursing than that which could be properly furnished in cheap buildings with no special structural provisions, were removed from the Danvers hospital, its overcrowding would be sufficiently relieved to enable it to do remedial work for those who do need the special and expensive structural arrangements of a hospital for the insane, a work which it is impossible for any staff of medical officers to accomplish satisfactorily under the existing circumstances."

That the difficulties complained of in the article quoted are by no means peculiar to the State of Massachusetts is apparent at once to every one who has given, or will give, a little attention to the subject. In nearly every state in the Union may be heard the call for enlarged facilities for the care and treatment of the insane. In our own state there is urgent need for enlargement of the exist-

ing institutions as well as the early completion of the new asylum for which an appropriation was made by the last legislature.

Concerning our St. Louis Insane Asylum as much and more may be said in as strong terms as those used by the *Boston Journal* concerning the Danvers Asylum.

Designed originally for the occupancy of two hundred and fifty insane patients, there was under its roof during the last year an average number of four hundred and forty three patients, and the preceding year a daily average of four hundred and fifty-one, 77 per cent. more than its normal capacity during the last year; 84 per cent. more than its normal capacity during the preceding year. What possibility for systematic classification or efficient treatment can there be under such a condition of things? In some of the rooms six and eight mattresses are piled upon the bedstead and covered up during the day to be spread upon the floor and made into beds at night. What more can our St. Louis Insane Asylum be now than a mere place of detention instead of an hospital? With how much confidence that any benefit will accrue can we commit our demented patients to an institution so over-crowded? The present condition of affairs is a disgrace and a shame to the city. Some provision must speedily be made for meeting this urgent need.

Two or three modes of increasing the capacity of the institution are feasible. First, additional wings might be constructed in connection with the old building. In the last report of the State Insane Asylum No. 2 we find some figures which bear directly upon the point. Dr. Catlett says in discussing the question of enlarging the St. Joseph Asylum: "The average original cost of constructing the eighty-five state and private asylums in the United States is estimated at $1,000 for each inmate accommodated, and the average cost of making additions to and enlarging existing institutions is much less than half that sum." It is possible that at some future time it may be best and may be feasible to enlarge the Insane Asylum by the erection of additional wings of a similar character with the present structure.

A second plan would be the erection of additional cottages in which certain classes of patients can be cared for certainly as well if not better than in the large wards.

In the annual report of the Superintendent of this Institution, Dr. Stevens expresses himself as follows: "I think it is now clearly enough demonstrated that the 'Cottage System,' as it is called, is not the system by which St. Louis is to feed, clothe and shelter this great multitude. The epileptics, the idiots, the imbeciles, the aged and the incurable insane, have, to use a common expression, come to stay.' The cottage plan has, indeed, been a very costly experiment, and although the seventy inmates are apparently very happy and comfortable, I am sure the most ardent advocates of that system, comprehending the history of our enterprise, will not desire to see the experiment repeated."

Just wherein lies the ground for such utter dissatisfaction with the "cottage system" is not perfectly apparent. That the experiment thus far has been far more expensive than it need to have been or should have been, is certainly true. By reason of mismanagement the two cottages now occupied have cost the city some thousands of dollars more than they need to have done, but even so they furnish comfortable accommodations for seventy patients at an average cost per inmate of only about one hundred and eighty dollars, instead of between four and five hundred dollars per capita, which it would cost to enlarge the main building. There is no apparent reason why other cottages might not be constructed at proportionate expense 25 to 40 per cent. less than was incurred in erecting the present ones, and sufficient in number to afford accommodation to enough of the inmates of the large building to permit proper classification and effective treatment.

Another plan which has been proposed by the Health Commissioner, and, which is probably the most feasible and practicable of any, is to construct two buildings one or two stories in height of sufficient size to provide for the common paupers of both sexes and then to devote the whole of the present poor house to the care of the

chronic and incurable insane. It is estimated that thus some two hundred patients of this class may be removed from the insane asylum and materially relieve the pressure there.

That some such enlargement of facilities must speedily be effected is evident. How best to do it with an eye not only to present emergency but to future increasing necessities demands the most thoughtful consideration of those whose responsibility it is.

SMALL-POX AND ANTI-VACCINATION RIOTS IN MONTREAL.

One of the most malignant epidemics of small-pox that has been known in many years has been raging for weeks in the city of Montreal, Canada. The first appearance of the disease was in April, but it did not become unusually prevalent until midsummer, contrary to the usual observation according to which this disease is generally most malignant in cold weather.

The disease has prevailed more particularly in the French quarters of the city, where ignorance and neglect of all sorts of sanitary precautions characterize the population.

The Canadian French are as a class wholly unprotected by vaccination and for years have formed a most dangerous problem in Canadian sanitation by reason of their bigoted prejudice against this precautionary measure. They refuse not only to vaccinate but also to report cases of the disease or to take any precautions whatever against its spread; and they manifest the utmost indifference to the terrible mortality caused by the ravages of the disease which they are harboring and propagating in their midst. While some of their priests have urged the people to practise vaccination, others have encouraged them in their opposition to it, telling them that the pestilence is a punishment for sins committed and that the remedy is to be found in the more zealous performance of religious rites and ceremonies.

The difficulties of the situation are further enhanced by the feel-

ing of race hostility which is aggravated by the comments of the English press criticising the French population as regards cleanliness. The comparative cleanliness of the two races has been a sore subject for a long time and the ground of much bitter controversy between the papers of the two classes.

This state of feeling existing, there has been very naturally a reluctance to resort to extreme measures and enforce vigorous sanitary precautions, and the efforts made to arrest the pest have been nearly fruitless. Finally, however, the rapid spread of the disease and the interference with business caused by the vigorous measures taken by the sanitary authorities of other places to protect their people from the danger to which communication with the infected city would expose them, made it apparent to the authorities that the most active course must be adopted; and it was determined to carry into force measures for compulsory vaccination. A branch health office was opened and orders were issued for the vaccination of every one in the French quarter.

Almost immediately a mob attacked the office and wrecked it. The police were powerless. The mob grew in numbers and strength as it went on and attacked the central office of the board of health, stoned the house of the health officer, Dr. Laberge, and other officials, then the city hall and the office of the *Morning Herald*. Windows were broken, buildings demolished and the police were driven from the streets by the mob. Order was only restored by the arrival of troops with rifles and bayonets. Military force was required on the following day to prevent a renewal of the rioting.

No serious disturbance has occurred since, but the disease still continues with great severity.

The experience of this Canadian city is another evidence of the folly of neglecting vaccination. Let all our health boards see to it that all school children are vaccinated and let them urge upon the people of their communities the urgent importance of vaccination and revaccination. Let there be among us no communities of unprotected persons, a danger not only to themselves, but to all about them.

BOOK REVIEWS AND NOTICES.

THE TREATMENT OF OPIUM ADDICTION. By J. B. MATTISON, M. D., etc. *New York and London: G. P. Putnam's Sons*, 1885. 12mo., pp. 49; cloth.

This little volume contains a *résumé* of the method of treatment of opium addiction which Dr. Mattison has been successfully practising for some years. The theory certainly commends itself to the favor of every thoughtful physician, and Dr. Mattison's experience confirms its efficiency. We shall not give a summary of his views here, as they are stated in full in the COURIER for December, 1884.

A PRACTICAL TREATISE ON URINARY AND RENAL DISEASE, including Urinary Deposits. Illustrated by numerous cases and engravings. By William Roberts, M. D., F. R. S., etc. Assisted by Robert Maguire, M. D., Lond., etc. Fourth edition; 8vo.: pp. 628; cloth. (St. Louis, J. L. Boland; J. H. Chambers & Co.)

This most valuable work well deserves the title of a practical treatise. It has been out of print for some years and this newly revised edition is very welcome indeed.

Dr. Roberts has aimed to make the work valuable, especially in actual practice and as a clinical assistant. While the whole work has been carefully revised, the changes from the third edition will be found particularly in connection with the chapter on albuminuria and micro-organisms in the urine.

Dr. Roberts regards the tests for albumen which have lately been so much lauded as more delicate than the tests by heat and nitric acid, as being unreliable, inasmuch as they cause a precipitate with mucin which cannot without farther test be distinguished from albumen.

Most of the work of revision was done by Dr. Maguire; but Dr. Roberts himself has rewritten the chapters on albuminuria and micro-organisms in the urine, and materially changed them, while he has added a good deal to the chapters on Bright's disease.

In connection with Dr. Roberts' remarks on epithelium in the urine (chapter IV.) we would call attention to some observations of Dr. W. H. Porter, of New York, published in the first number of the *Quarterly Bulletin of the Clinical Society of the Post-Graduate School of Medicine.*

Dr. Roberts says: "The urine of the two sexes differs notably in the character and quantity of the epithelial cells found therein * * * and advantage may sometimes be taken of this circumstance to distinguish the sex of the individual whose urine is under examination." Dr. Porter says "that flat epithelial cells are found in the urine of females more frequently than in that of males; that they originate both in the vagina and in the bladder, probably more frequently in the bladder and the urinary tract." He does not admit the possibility of determining with any positiveness that certain epithelial cells found in the urine are derived from the vagina, and others from one or another part of the urinary tract, for he has found in urine removed from the bladder by a post mortem abdominal section epithelial cells identical in form and size with those which have commonly been called vaginal; and other observations have led him to the conviction "that it is absolutely impossible to diagnosticate with certainty between renal cells and those of the deepest layer of the mucous membrane of the urinary tract."

The publishers have done their part admirably in the presentation of this volume to the profession.

TRANSACTIONS OF THE AMERICAN SURGICAL ASSOCIATION. VOLUME II. Year 1884.

This volume has a number of very worthy articles. Many of the members seem to have divested themselves of the simple desire to write, and have devoted themselves to new proofs of important facts, the giving of details of some more or less independent work or to the recital of important cases.

We have two articles on the important subject of Anesthesia, one of these an experimental study by Dr. Watson, and the other a statement from Dr. Cheever, which gives a very clear and practical statement of the advantages and disadvantages of anesthesia, together with some directions for the safe administration of ether. It is evident that he has been a close observer and of wide experience. I am also much pleased with the article of Dr. Gay on Tracheotomy, in which he takes, as I think, the very proper posi-

tion of insisting upon giving all patients suffering from laryngeal obstruction the benefit of tracheotomy. One of the most important subjects considered in the volume is that of cicatrization in the blood vessels after ligature, by Dr. Senn, who, after giving the history of the ligature of blood vessels, reports some experiments made by himself. As a result of these observations and experiments he concludes that a cat-gut ligature answers every purpose of a temporary hemostatic, showing that the cicatrization of the blood vessels takes place more perfectly and more uniformly when it is used, than with any other known absorbent ligature. This cicatrization, he contends, also occurs without the organization of a thrombus but by adhesion of the coats of the vessel. The animal ligature does not sever completely the vessels, but permits cicatrization with a fibrous band uniting the two ends, and the ligatures add strength to the cicatricial tissue. He thinks it is very important for the uniform and early cicatrization of blood vessels that the wound should be entirely aseptic.

The article of J. Ewing Mears on Tri-facial Neuralgia is worthy of note for two points: First, he gives the result of some microscopic studies of a nerve involved in neuralgic pain, which showed that there was an inflammatory process accompanying the condition. Secondly, for the suggestions that he makes of following the nerves not only to their points of exit from the skull, but also in cases where it is demanded, suggesting the removal of a portion of the bone, and a part of the Casserian ganglia.

There are a number of other worthy articles, making the volume an important contribution to our American Surgical Literature.

A Guide to the Diseases of Children. By James Frederick Goodhart, M. D., F. R. C. P. Revised and Edited by Louis Starr, M. D. With formulæ. *Philadelphia: P. Blakiston, Son & Co.* 1882. 12 mo.; pp. 738; cloth.

This volume is one which may be safely recommended to student or practitioner. It is evidently the product of the author's own experience and not merely a compilation from other authors. In general the style is pleasant, though occasionally a little involved.

Some doubt may arise as to the correctness of Dr. Goodhart's views in certain cases, e. g., as to his belief that pyrexia alone may be a sufficient cause for infantile paralysis, vid. p. 502, but in the main his opinions and practice are reliable. Dr. Starr has made

some valuable additions to the volume, introducing the results of observation and practice in America where they differ from those of the British author.

A Complete Pronouncing Medical Dictionary, Embracing the Terminology of Medicine and the kindred sciences with their Signification, Etymology and Pronunciation. With an appendix comprising an Explanation of the Latin terms and phrases occurring in Medicine, etc. By Joseph Thomas, M. D., LL. D., etc. On the basis of Thomas's Comprehensive Pronouncing Medical Dictionary. *Philadelphia: J. B. Lippincott Company.* 1885. 8vo.; pp. 844; cloth.

Every one who hears physicians speak in the lecture room or at meetings of medical societies well knows that there are very few of them who do not need to use very diligently and very frequently such a volume as that now before us.

We have been told of Prof. O. W. Holmes that he spoke to his students at the opening of one of his courses of lectures something like this: "Young gentlemen, as you listen to my lectures you will probably notice that some words I pronounce differently from what you have been accustomed to hear them pronounced. In such cases it is not worth your while to spend time to refer to your dictionaries to see whether or not I am right, but you will better note the word and hereafter pronounce it as I do. This may seem to you at first thought to be an arrogant assumption on my part, but if you will remember that for many years my work has been largely with *words* you will see that it is no more an assumption on my part to say that I know words and know how to use them, than for a carpenter of years of experience to say that he knows a plane and how to use it."

Not many, even of those who have been using words in public speaking for years, can make any such claim as the eloquent and classic Professor of Anatomy of Harvard University Medical Department. It is a disgrace to our profession that so many of those who talk much speak so inaccurately and mispronounce so grossly. It would be well for every medical student and every physician to keep constantly within easy access a dictionary, and to refer to it whenever in doubt as to a pronunciation, especially whenever the attention is attracted by a pronunciation which strikes the ear as strange.

So far as we have been able to examine "Thomas's Pronouncing Medical Dictionary," it seems to us to fulfill all the requirements for such a work.

THE USE OF THE MICROSCOPE IN CLINICAL AND PATHOLOGICAL EXAMINATIONS. By Dr. CARL FRIEDLAENDER. Second edition, enlarged and improved, with a chromo-lithograph. Translated, with the permission of the author, by HENRY C. COE, M. D., etc., *New York: D. Appleton & Co.*, 1885. 12 mo., pp. 195; cloth.

This little volume forms a very handy and reliable guide to the use of the microscope in practical clinical work. Rather more than half the volume (108 pages) is devoted to a description of the accessories that are essential to good work with the microscope, and of the reagents that are used in staining specimens, and in other manipulations of micro-chemistry. This last is a most important part of the work on account of the necessity for such work in studying bacteria, a department of microscopy which has assumed so prominent a place of late years.

The remainder of the volume is devoted to the modes of examining various fluids and tissues of the body. The descriptions are clear, and the volume seems to us well calculated to fulfill the end proposed by the author in its preparation.

BOOKS AND PAMPHLETS RECEIVED.

Suggestions on some Symptoms of Renal Disease and their Management. By Charles W. Purdy, M. D. Reprint from Jour. of Am. Med. Assoc.——Practical Therapeutics. A Compendium of Selected Formulæ and Practical Hints on Treatment, Systematically Arranged, Interleaved and Indexed. By Edward J. Bermingham, A. M., M. D., etc. New York; J. R. Bermingham, 1885. 8vo.; pp. 20; cloth.——A Complete Pronouncing Medical Dictionary. By Joseph Thomas, M. D., LL. D. On the basis of Thomas's Comprehensive Pronouncing Medical Dictionary. Philadelphia, J. B. Lippincott Company, 1886. 8vo.; pp. 843; cloth, (St. Louis: J. H. Chambers & Co.).——Diseases of Children. By Alfred Vogel, M. D., etc. Translated and Edited by H. Raphael, M. D., Third American from Eighth German edition, revised and enlarged. Illustrated by six lithographic plates. New York: D. Appleton & Co., 1885. 8vo.; pp. 640; cloth. (St. Louis Stationery & Book Co.)——Use of the Microscope. By Dr. Carl Friedlaender. Second Edition, enlarged and improved, with a chromo-lithograph. Translated with the permission of the author. By Henry C. Coe, M. D., etc. New York: D. Appleton, 1885; 12mo.; pp. 195; cloth.——Moisture and Dryness; or, the Analysis of Atmospheric Humidities in the United States. By Charles Denison, A. M., M. D., etc., Chicago: Rand, McNally & Co.: Jansen, McClurg & Co., 1885, 8vo.; pp. 30; cloth: 8 maps: $1.00.——Insomnia and Other Disorders

of Sleep. By Henry M. Lyman, A. M., M. D., etc. Chicago: W. T. Keener, 1885. 12mo., pp. 239; cloth.——Eighth Annual Report of the Health Commissioner City of St. Louis. Fiscal Year Ending April 13, 1885. John D. Stevenson H. C.——The Ten Laws of Health, or How Diseases are Produced and Prevented, etc. By J. R. Black, M. D. Philadelphia: J. B. Lippincott & Co. 1885. 12 mo., pp. 413; cloth; $2.00.——Poisons, their Effects and Detection. By Alex. W. Blyth, M. R. C. S., etc. With Tables and Illustrations: Vol. II. New York: Wm. Wood & Co., 1885; 8vo.; pp. 332—668; cloth. (Wood's Library.) (St. Louis Stationery & Book Co.)——On Renal and Urinary Affections. By W. H. Dickinson, M. D., Cantab, F. R. C. P., etc.——Miscellaneous Affections of the Kidneys and Urine. New York: Wm. Wood & Co. 1885; 8vo.; pp. 343; cloth. (Wood's Library.) (St. Louis Stationery & Book Co.)

Albumen in Urine of Cadavers.—In twenty-eight subjects found in the morgue, MM. Vibert and Ogier found only five whose urine did not contain albumen. In all the rest the quantity of albumen corresponded with the advancement of decomposition, whence they concluded that it was a result of post-mortem changes and that it is probably to be referred to decomposition of vesical mucus. Direct proof that the albuminous substance comes from the vesical walls may be made by removing the bladder from a cadaver, emptying it of urine and filling it with distilled water, when, in a short time, it will be found that the water has become distinctly albuminous. The importance of this fact from a medico-legal point of view is apparent. In an autopsy where no sufficient cause of death had been found, examination of the urine might have led to the conclusion that the deceased was albuminuric. The result of these investigations show that such a conclusion would be unwarranted.—*Ann. d'Hygiène Publique: Jour. de Méd. et de Chirurg. Prat.*, Aug. '85.

Quarterly Bulletin of the Clinical Society of the New York Post-Graduate Medical School and Hospital.—This is the last new medical periodical. It is beautifully printed, and the original papers, as well as the discussions, are of great interest. The gentlemen connected with the school are so utilizing their clinical material not only for their own interest but also for that of the profession at large. We shall consider the "Quarterly Bulletin" one of our most highly prized exchanges, if succeeding numbers equal in merit this first number.

REPORTS ON PROGRESS.

MEDICINE AND THERAPEUTICS.

Oxalate of Cerium as an Anti-emetic.—Dr. W. R. Chittick urges the use of oxalate of cerium in much larger doses than those usually prescribed for arresting vomiting in various morbid conditions. He is satisfied that the drug is harmless. He reported to the New York Therapeutical Society, in April, 1880, a series of cases in which the drug was used in doses of three, five and ten grains three times a day for cough of phthisical patients, affording relief to some and benefit to all, the greatest advantage being found in those where the cough was caused by or associated with an irritable stomach.

He would advise giving it in doses of eight to ten grains every two hours until relief is obtained in cases of irritable stomach where a sedative action is required. It may be combined with any other remedy that is indicated by the morbid condition present. In the vomiting of pregnancy he finds a combination of this drug with ingluvin to be very valuable.—*Detroit Lancet*, Sept., 1885.

Hemoglobin Pills.—Ziemssenn's success with hemoglobin pills in the treatment of chlorosis is attracting a good deal of attention, according to the *Deutsche Medizinal Zeitung* May 11, 1885. The pills are prepared from ox-blood, are of the size of a hazel-nut, and weigh, aside from their chocolate coating, over thirty grains. The daily dose is six pills, containing nearly twenty-five grains of hemoglobin = ½ grain of iron. This is presented to the digestive organs in a form free from all irritative properties, and is no doubt quickly and easily absorbed. Direct inspection demonstrates a remarkably quick rise in the percentage of red corpuscles, leading, of course, to a general improvement of health.—*Therap. Gaz.*, Aug., 1885.

Buttermilk to Allay Vomiting.—Dr. J. H. Owings states that he has used buttermilk for ten or fifteen years and knows nothing better to allay vomiting, especially the severe vomiting following a prolonged debauch.—*M'd Med. Jour.*, Aug. 22, 1885.

Hiccough Relieved by Nitro-Glycerine.—Dr. O. T. Schultz relates the case of a miller, æt. 58, affected with fibroid phthisis, and who during an acute exacerbation of this disease last February and March had repeated attacks of angina pectoris, apparently excited by the severity of the cough.

During the great heat of last July hiccough set in and continued with only partial and transient relief from any of the remedies administered, viz., morphia with and without atropia, strychnia, bromide of potassium and electricity, until on the tenth day, when, thinking that the same influence which previously caused the angina pectoris might lie at the foundation of this trouble, one drop of a one-per-cent solution of nitro-glycerine was administered. Almost immediately a severe headache commenced, but the hiccough gradually abated and in a half hour had entirely ceased. The remedy was continued at intervals of two hours. There were slight returns of the hiccough during the day and the following night and day; but on the twelfth day the unpleasant symptom was entirely relieved and did not return.—*Practitioner*, Sept., 1885.

Teething Syrup.—M. Vigier suggests the following formula to allay the suffering often caused to infants in cutting teeth, especially the canines.

℞ Cocain. hydrochlorat, - - 10 c gr. = gr. jss.
Syr. simplicis, - - - - - 10 gm. = ℥ijss.
Tr. croci, - - - - - - - gtt. x.

M. S: Rub gently upon the swollen gums several times a day.—*Gaz. Hebdomad.* 24 *Juillet*, 1885.

External Applications for Night-Sweat.—Nicolai reports good results in the treatment of night-sweats of phthisical and other patients by lotions of chloral dissolved in equal parts of brandy and water (one dram to a tumblerful). The patient should be sponged with this lotion every evening before going to sleep. If this does not control the sweating the night-shirt should be soaked with the lotion and then dried. This treatment has been particularly serviceable in the night-sweating of non-phthisical children. Three or four rubbings will sometimes arrest the sweating for several weeks.

Radakow recommends frictions with a mixture of tincture of belladonna and water (a dram to the ounce) the fluid being poured into the hand and rubbed over the whole surface, about two hours before the time when the sweating occurs. He claims success in fifty consecutive cases of night-sweats from phthisis.—*Gaz. Med. de Paris*, June 6, 1885. *Therap. Gaz.* Aug., 1885.

Therapeutic Applications of Caffeine.—Dr. Thos. J. May has made a careful study of the physiological action of caffeine, theine and guaranine, having made series of experiments with each of those drugs upon frogs.

As to the therapeutic uses of caffeine, he finds that caffeine has a profound tendency to contract and give tone to muscles by stimulating their motor nerves. Since its chief effect on the human organism is expended upon the unstriated muscles of the heart and circulatory organs its chief field for therapeutic application must be in connection with diseases of the heart. He does not think it will displace digitalis, although in certain cardiac disease it is superior to that drug. In some cases we can get equally as good or better results with caffeine as with digitalis without the risk of toxic effects which sometimes attend the use of digitalis. Caffeine, then, he finds to be safer and quicker in its action than the other drug. Its special value is in cases of weak heart, in valvular insufficiency depending more upon imperfect irritability or contractility of the heart-muscle than upon a loss of valvular area.—*Therap. Gazette*, Sept., 1885.

Cascara Sagrada in Chronic Functional Constipation.—Dr. Ralph D'Ary states that after much use of cascara sagrada in the treatment of chronic constipation he has become convinced that it is not a cure for constipation when used alone, and he recommends the following formula as giving a remedy the use of which can be *gradually* discontinued with the result of permanent relief from this condition.

℞ Ext. cascara sagrada, - - - - - gr. iv.
Ext. nucis vomicæ, - - - - - - gr. ss.
Ext. belladonnæ, - - - - - - gr. ¼.
Res. euonymi, - - - - - - -
Res. exanthoxyli, - - - - aa gr. iij.
Oleores. capsici, - - - - - - gr. ⅛. M.
Make fifteen pellets.

Fifteen pellets represents the ordinary maximum dose. He directs a patient to take five pellets at night only, increasing the dose one pellet each night until the action is sufficient. Then continue taking this dose, whatever the number be, every night for a week. Each following week diminish the nightly dose by one pellet until it is reduced to none at all. If, after such a course, constipation still persists, he would direct the patient to begin again with five pellets less than at first and repeat the gradual decrease.—*Therap. Gaz.*, Sept., 1885.

Palatable Castor-Oil.—Dr. Oppler suggests powdered roasted coffee as a means for rendering castor-oil palatable. It should be added in quantity sufficient to reduce the oil to a paste. The following proportions he has found efficient.

℞ Castor-oil, - - - - - - - 20 parts.
White sugar, - - - - - - - - - -
Powdered roasted coffee, - - aa 10 parts.
M. Sig. A tablespoonful a dose.—*Therap. Gaz.*, Sept., 1885.

Pulmonary Tuberculosis.—Prof. di Renzi, of Naples, has practised the following treatment in thirty-one cases of pulmonary phthisis, seventeen men and fourteen women:

1. Internally tonics and antiseptics; among the first, Peruvian bark, phosphate of lime, etc.; among the latter, creosote, the alkaline carbonates and iodoform.

2. Inhalations of ozone, of nitrous vapors, of iodoform, of turpentine, with expirations into rarefied air followed by inspirations of compressed iodized air.

He found benefit particularly from the inhalations, always excepting those of alkaline reaction; yet the alkalies taken internally increased the weight and improved the general condition in two-thirds of the cases. If we add the expirations into rarefied air and the inspiration of compressed iodized air we have the height of good effect obtained in the Neapolitan clinic.—*Gaz. degli ospitali*, No. 55; *L'Union Méd.* 5, Sept., 1885.

Ox Gall in Typhoid Fever.—Dr. George C. Van Schaik has found such satisfactory effects produced in treating typhoid fever with ox-gall, that he recommends its use to others. He gives from one to three drams in divided doses each day, and believes that it keeps down the temperature, regulates and strengthens the heart's action and materially alleviates other unfavorable symp-

toms. While he does not expect it to succeed uniformly, he regards it as a valuable agent in treating this disease.—*Quart. Bulletin*, Aug., 1885.

Resuscitation from Chloroform Poisoning.—R. M. Murray suggests a new method of resuscitating persons whose respiration has been suspended while inhaling chloroform. He thinks that artificial respiration, as ordinarily conducted, rather promotes the absorption of a new quantum of the vapor, the air remaining in the lungs being saturated with chloroform, and he proposes to suck the air out of the lungs and allow them to expand by their natural resiliency. Many and repeated experiments upon animals evidence the value of his suggestion.—*Edin. Med. Journ.* Sept. '85.

Cocaine in Hay Fever.—Dr. S. C. Ayers concludes from his own experience with muriate of cocaine in hay fever, that:

1. In the early stages of the disease and in mild cases it will prove very grateful and will control the paroxysms.

2. In the more severe stages of the disease it will have little or no effect.—*Cin'ti. Lanc. and Clin.* Oct. 3, 1885.

SURGERY.

Treatment of Furuncles.—Gingeot gives the following indications of treatment: 1. If possible, to cause the furuncle to abort; 2. This failing, to moderate the amount of suppuration; 3. To antagonize the constitutional condition which favors the development of furuncles.

His experience leads to the following principles: 1. Never to open early; 2. Seldom or never to open at all, even if suppuration have taken place, but to leave the boil or furuncle to nature. He opposes the use of poultices. He regards furuncles as the product of parasitic action.

He recommends the application, three or four times a day, for a few minutes, of compresses wet with spirits of camphor, and asserts that when so applied early the furuncle will often be aborted. The same result may be hoped for from the application several times a day of tincture of iodine over the furuncle and a little beyond.

In carbuncles the same treatment is often successful in arresting the development, but if this cannot be stayed he advises a strong solution of carbolic acid (equal parts of the acid and glycerine) ap-

plied direct to the diseased issue either through any spontaneous openings in the centre of the swelling, or through one made with acid nitrate of mercury.

When the furuncle is open and discharging he thinks boric acid, in powder freely dusted on is the best application or else a saturated aqueous or alcoholic solution applied by means of compresses. Gingeot approves of the internal use of sulphide of calcium in small doses, (one-sixth or one-four grain) every two hours.—*Bull. Gen. de Therap.*

On page 59 of July Courier is given a summary of Dr. L. D. Bulkley's treatment of carbuncles which, it will be noticed, is in many particulars like that of Gingeot, viz., in the discarding of the knife and poultices, etc.

Elastic Bandage for Sprained Ankle.—Dr. T. A. Cunningham reports a case of the successful use of the elastic bandage, in the treatment of a severely sprained ankle. Dr. C. saw the patient about ten minutes after the accident. The external lateral ligament was ruptured and the foot turned in so as to almost amount to a dislocation. He straightened the foot and rubbed the joint well with lotion of subacetate of lead and opium. He then applied an Esmarch bandage which had been condemned for its original use, but still retained enough elasticity to compress the joint. He applied this firmly and evenly over the entire foot and joint, and about two inches up the leg. The patient was put to bed and the foot elevated. In three days she was able to be up and about some, still wearing the bandage, which was daily removed and reapplied after thoroughly rubbing the ankle with camphorated oil. At the end of three weeks she was discharged perfectly cured.—*Phila. Med. Times.* Sept. 5, '85.

Citric Acid in Malignant Growths.—Dr. Fenn, of San Diego, Cal., reports two patients with strongly marked family history of cancer, and having suspicious growths upon the face which appeared to be of a malignant character, who were treated with hypodermatic injections of a saturated solution of citric acid. By this means the size of the morbid growth was very much reduced, and the extent of incision for ultimate removal was very much diminished. In one case six years, in the other three years, have elapsed without any recurrence of the disease. He recommends further trial of this agent.—*Journ. Amer. Med. Assoc.* Aug. 22, '85.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, September 17th, 1885, Dr. McPheeters, President, in the Chair.

Induction of Premature Labor.

Dr. Coles read a paper on "The Induction of Premature Labor in Certain Cases." Vid. p. 385.

Dr. Prewitt.—I will ask Dr. Coles what is the objection to the use of the douche?

Dr. Coles.—I have never had any experience with the douche in these cases myself, but there seems to be some doubt as to what the real danger is. Those authorities who have reported fatal cases say that some seem to die from the sudden shock, others say from the entrance, possibly, of air or fluid into the sinuses; also from rupture of the uterus from over distention, which is apt to occur when force is employed and the fluid is confined within the uterus and vagina.

Dr. Prewitt.—There is no danger of the introduction of fluid into the sinuses by injecting water into the vagina; the danger is of rupturing the uterus.

Dr. Coles.—I do not think there is any danger if you allow the water to flow out freely, but the manner in which the douche was used in former times by some, using force in the injection of the fluid and preventing the water from flowing out of the vagina, caused the vagina to be filled to its utmost capacity and at the same time caused the fluid to enter the uterus, distending it and rendering the organ liable to rupture. Barnes reports ten fatal cases, and, in fact, nearly all authorities allude to these cases: Simpson, Tarnier, Velpeau and others. The idea, formerly, was

to detach the membranes by the forcible injection of water; this is dangerous.

Dr. Boisliniere.—I don't think there is such great danger in the use of the douche as has been expressed by these authors. I have not used the douche in the way Dr. Coles has stated, by confining the water in the vagina: I have used the douche as a means of inaugurating the process of dilatation, the patient being in bed in the lithotomy position with an oil-cloth under her, forming a gutter, causing the fluid to run into a bucket. I have also, with the aid of an intelligent nurse, used the douche from a fountain syringe, not from a very great height, I suppose as long as two hours at a time, allowing the water to run out freely, not remaining in the vagina at all; the current being directed against the neck of the uterus so as to inaugurate the process of dilatation. The result has been satisfactory.

I remember a very interesting case that I saw with Dr. Lemoine, a very beautiful lady from Nashville, who had the form of pelvis well called by Naegele the ovai oblique pelvis, where one tuberosity of the ischium protrudes in front—one side of the pelvis being larger than the other, the smaller side being quite contracted. In this case the antero-posterior diameter was very small, less than three inches certainly, so that it was impossible to deliver this woman at full term. Therefore we determined to induce premature labor in that case, and we succeeded very well, but it was very tedious, because the woman was not more than seven and a half months pregnant, and the uterus did not respond very readily to the means adopted.

We began by the use of the douche in the hands of a very intelligent nurse. This was kept up for perhaps two days, with intervals of two hours' rest, and on the second day or so we found that there were evidences of dilatation. We then used Barnes' dilators to effect further dilatation, and as soon as this had advanced sufficiently to permit the introduction of a bougie, we used one. The introduction of this was very difficult on account of the narrowness of the pelvic inlet. Although she was a primipara, there was an extraordinary anterior obliquity of the uterus, which made it very difficult to introduce a bougie deep enough. As the doctor well remarked, it is very easy to talk about, but it is sometimes very difficult to manage. It is well in such cases to make use of Sims' speculum because the very great anterior obliquity of the womb

will throw the cervix backward. In this case, with a Sims' speculum, the neck was reached and drawn down with a vulsellum and the bougie introduced in an exaggerated direction of the axis of the superior strait.

I am surprised at the statement of Dr. Coles that in one case he introduced the bougie four or five inches only. I don't think that is far enough, although he appears to have secured a good result; I introduced it not less than seven or eight inches, and then following the usual method, I secured it, twisted it in a knot and placing a sponge against it kept it in place. After this the labor proceeded very rapidly, the pains began, and in a few hours the child was delivered. It lived a very short time if at all; I don't remember now. The woman made a complete recovery. After that she went away to Memphis or Nashville and again became pregnant and died in child-bed. The induction of premature labor was not, I believe, performed this time. In this case I found the douche against the cervix a great advantage. I do not fear that it will cause any serious results by penetrating the uterus, because the uterus is filled by the unruptured membranes; nothing can get into the uterus when the cervix is not dilated more than the size of a five or ten cent piece. There is another form of douche that is extremely dangerous. I have come very near killing three or four women with it; that is "Cohen's method" of intra-uterine injections, which is introducing water into the uterus between the membranes and the uterus. This is apt to cause the most pronounced collapse, rigors, fever and traumatic metritis, without accomplishing any good results. I, at least, have not accomplished any good by it; I have tried the method three or four times, when I used to believe what was stated by the masters. I don't believe all their statements now. This form of douche is a thing to be rejected altogether. The injection of the uterus with carbolic acid and like substances should be avoided. At any rate the women came near dying from shock, so I abandoned this method, but I have continued the use of the douche in the manner I have mentioned.

Of course I have accomplished the same results without the use of the douche in cases of great urgency. I remember one patient here who was a victim to asthma. When I saw her with Dr. Alleyne the day before delivery, she had pulmonary congestion of the most intense character; she was cyanotic, and we kept her alive only by repeated doses of ammonia, a remedy which, to my

belief, in such cases is the best of all; but finally we found that there was not much relief, and that the patient would certainly die unless something was done; and the induction of premature labor was suggested. This was very difficult of accomplishment, because the woman had to be propped up and her legs pulled apart, and in that position I introduced the bougie. This was a most difficult position; she was seven or eight months pregnant. I made a sweeping movement with the bougie, detaching the membranes, and in less than half an hour she gave birth to the child. If the placenta is detached to some extent, a clot will form which will prevent internal bleeding. If the bag of waters is ruptured it is no great misfortune, as it will accelerate labor; and if the water flows too freely you can stop it by closing the opening of the rubber male catheter, which should preferably be used for this operation. That has been my experience.

I remember another case, that of an Englishwoman, who had three or four unfortunate labors in England due to a contracted pelvis. All her children had been boys, and she had lost two or three in England; her pelvis measured a little less than four inches. I induced premature labor in her case by these methods. The first attempt I made was with the forceps and it failed; the child was born, but the head was very much disfigured, and it died during labor or soon after. At the second labor, as I did not wish to undertake the same process again, I used the method which I have mentioned. I induced premature labor three times in her case, and in all cases the child was born dead, or it was born alive and died in a short time. One child was born alive and died from congenital debility, I suppose, a few weeks after. Labor was brought on at about seven and three-quarters or eight months. The nearer the child is to full term the more rapid becomes the cranial ossification, and I believe that is about the proper time to induce premature labor. I then lost sight of this woman, she went away, and I saw no more of her until I was called in two years after to see a man sick at the house of these people, when her husband showed me a beautiful little *girl*, six months old; the woman had been out in the country and with the assistance of a midwife had given birth to this girl, it being a small child; the other children being all boys were much larger. The paper of Dr. Coles is a most able one, and he has enumerated all the cases that call for this interference.

The cases the doctor reported are most interesting, especially the

case of chorea, although I believe the doctor failed to state whether the child was born dead or alive. I never had a case like it, but I had several cases of women with contracted pelvis, in which I have resorted to this measure perhaps a dozen times at least. In some of them cases the children were born living, in a greater number of these the children were born dead or survived only a short time. All these cases presented marked contraction or deformity of the pelvis. One of the points that I like very much in the doctor's paper is the suggestion that we have a wet nurse secured in advance; also the necessity of keeping the child warm; at this period it does not generate sufficient heat. I think the couveuse of Tarnier, which is a hatching box, is very good. I have devised a hatching box, and did so a long time before Tarnier constructed his. Ten or fifteen years ago I had a tinner make a box, somewhat like a foot tub, and then inside of this I had another one placed three or four inches smaller all around; I take the child and wrap it in cotton batting, not wadding, but cotton batting, putting no clothes on it at all, and place it in the inner box; then pouring hot water in the space between the inner and the outer box, I keep the child in this warm bath, at a temperature of 98° or 100° for a month or six weeks. The warm water is furnished by a reservoir with a hose above the box, and a faucet at the bottom of this box lets the water out when becoming too cool. I think Dr. Coles has covered the ground completely, and there is nothing more to be said. I think that the induction of premature labor for contracted pelvis is the most humane and conservative operation in obstetrics, and it should be resorted to a great deal more than it is. Certainly it is better to adopt this procedure than to run the risks which attend a difficult forceps operation or turning; and, as I remarked some time ago before this society, I think the day is coming when it will be recognized as the duty of the accoucheur to make a primary examination of every patient who comes into his hands. I never fail to do so at least a month before labor sets in, to ascertain the condition of the parts especially of the pelvis and to ascertain the presentation and position of the child; this enables us to be prepared for any mal-presentation before labor sets in, and suggests at once the performance of the induction of premature labor. I think this examination should never be neglected.

Dr. Yarnall.— I have observed a very curious fact in my practice from a rational standpoint, that is that a seven-months child is

more likely to live than an eight-months child. Some years ago in the course of seven weeks I delivered several seven-months children and they all lived; two months following I delivered two eight-months children so-called, and they both died. I don't recollect in my practice that an eight-months child has lived, although seven-months children have, in a number of cases, survived. It is a curious fact.

Dr. Scott.—I was thinking while the paper was being read whether in these days of antiseptic surgery it would not be better for us to resort to laparotomy or Cesarean section at the eighth month rather than take the chances of the destruction or death of the child in inducing premature labor. I believe that nearly every child delivered by Dr. Coles at this early period died; very few have been saved. This is not the case with laparotomy to-day; it is a very successful operation under antiseptic precautions, so is Cesarean section.

Dr. Prewitt.—Do you mean to wait until the ninth month?

Dr. Scott.—Wait until the ninth and then deliver by laparotomy.

Dr. Coles.—I am surprised that Dr. Scott has so entirely misunderstood my paper. I reported five cases: three of the children are alive to-day: in one the mother died, but she was doomed when the operation was performed: it was done to save the child; the mother was in the last stages of phthisis, but in no case was the life of the mother jeopardized by the operation, except in this case, when she died of phthisis, and the child which was born died only because there were no facilities at hand for keeping it warm. In the other instance there was a breech presentation and the child died before the head could be delivered, but the mother got along very well. Statistics show that over two-thirds of the children delivered in this way live. This is a clear saving of sixty-six per cent. of children, with no extra risk to the mother.

Dr. McPheeters.—I don't think that laparotomy has attained, or will ever reach that degree of perfection which would entitle it to be substituted for an operation of this kind. Dr. Coles' paper is a very able and interesting one. During the present year I have been called upon by a gentleman to bring about premature labor in the case of his wife. I had previously delivered her of several large children, but, on this occasion, she was enormously distended; the abdomen was so large as to seriously interfere with her breath

ing by pressure upon the diaphragm and lungs. There was great edema and anasarca also. She could not turn in bed; could not get out of bed without assistance, and her condition was so uncomfortable that the husband, thinking that she could not possibly go to full term, asked me at the eighth month to induce labor. While I was hesitating, putting off interference as long as I could, intending however to resort to artificial means when it became absolutely necessary, the distension became so great that nature came to her relief; the membranes ruptured spontaneously and she passed an enormous quantity of water, flooding the bed and filling a slop jar two-thirds full, soon after which she was delivered of a twelve pound child. The kidneys acted very abundantly during the next twelve hours and the anasarca soon passed off. I will state that in this case there was no albuminuria. I examined the urine frequently before the birth of the child to see whether there was any albumen present, but there was none, though the pressure on the kidneys was excessive. In this case while I hesitated Nature gave the desired relief. I do not think that she could have gone to full term. This was a case which, in my opinion, would have justified the induction of premature labor but for the timely rupture of the membranes. I was very much interested in Dr. Coles' paper. I have no doubt that what he recommends will be recognized as a legitimate and conservative operation.

Dr. Boisliniere.—That case may have been one of dropsy of the amnion. What was the condition of the child? Was it hydrocephalic?

Dr. McPheeters.—No, sir; it was a large headed child, but not hydrocephalic; the child is still living; the previous labors of this patient were also remarkable for the very large amount of liquor amnii; but there was not the same extreme anasarca as in this case.

Dr. Briggs.—I would like to ask Dr. Coles and Dr. Boisliniere when they expect a secretion of milk in these cases.

Dr. Coles.—It comes on as usual after delivery.

Dr. Scott.—I had a singular experience last Monday morning. I was sent for to see a lady in confinement, and when I got to her I found she was having very severe expulsive pains. I made an examination and found a vertex presentation with the bag of membranes very low down in the vagina, almost against the vulva. They were very tense and hard. I passed my finger around and found that the uterus was dilated, and congratulated myself that in

a very short time labor would be terminated. The next pain was so severe that I expected the membranes to rupture at once, but they didn't. When the next pain came I ruptured the membranes, expecting the child to come down upon the perineum with a rush; the waters gushed out up to my elbow, and as they were expelled, the uterus relaxed, the child receded and it was one hour before she had another expulsive pain.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, September 22, 1885, Dr. Robinson in the chair.

Extirpation of Uterus.

Dr. Carson presented a specimen and read a paper on a case of extirpation of the uterus. (Vide October Courier.)

Dr. G. A. Moses said that the paper which Dr. Carson had read gave such a complete résumé of the subject that there was little to be said, except to congratulate the doctor upon the opportunity for the operation. It was a case peculiarly adapted for the operation. He should also be congratulated upon the success that had attended his effort. He said he rather envied the doctor, for he had been looking for such a case for five or six years and had seen but one in which he thought the operation proper, and in that case it was not done. Here, so far as the diagnosis could be made, and as the result proved, the disease was confined to the fundus of the organ. There was no advance of the disease into the lymphatics that could possibly be detected either before or after the operation. The operation by the vagina was in his opinion the only one at all permissible. In the light of the statistics up to this date the abdominal operation has been most disastrous, whereas the operation per vaginam, so far as the recitals of cases have been made leaves the patient in a condition of severe shock, perhaps accompanied by hemorrhage, such as we not uncommonly meet with in severe operations, but from which the patient will recover in a short time in all probability. In this case, as has been the history of most of these cases, the patient rallied promptly and there were no alarming symptoms at all. So far as the benefit to the woman is concerned, it would require further time to determine its full extent; but from a thorough and candid investigation of the histories of

patients upon whom the operation has been performed and from the statistics he was inclined to think everything very promising. Of course we do not know how many cases have been operated upon and resulted fatally which have not been reported.

The great difficulty is to detect the condition early enough to operate and be sure there shall be no lymphatic complication already commenced. Upon this, in his opinion, hinges the whole matter—the successful diagnosis. If this can be made he regards the operation a justifiable one, for even if it does not extend life longer than would be reached with the steady progress of the disease, certainly a large portion of the remaining life is relieved of an amount of distress, suffering, debility which is inevitable when the disease is allowed to progress without interference. In the paper read before the obstetrical society some three or four years ago he had stated that the operation should be suggested, but never urged; the possible advantages and dangers should be laid before the patient and her friends and a decision should be arrived at by them.

Dr. Funkhouser is a great admirer of the operation and was very enthusiastic over it until he read an article by Jackson, who objected to the operation because no operation had been successful in removing the disease entirely. Dr. Carson had informed him that there is one case on record in which five years have elapsed since the operation and there has been no return of the disease. When the conditions are present which have been designated by Dr. Carson in his paper as indicating a case proper for the operation, the operation ought to be performed. He was particularly interested in this case because he had one in which he had endeavored to remove a cancerous uterus some weeks previous to the operation performed by Dr. Carson. Several physicians saw the case before the time for operation was set, and it was feared then that the operation could not be successfully performed on account of adhesions, although a certain amount of the uterus—perhaps the neck—was movable. After stating to the patient all the facts, making it as gloomy a picture as he could, she still insisted upon having it removed. He cut open the abdomen, but found it not practicable to remove the uterus, and closed the opening. There were many firm adhesions, due to inflammatory action. The adhesions interfered with the action of the bowels. On account of the intense pain experienced at stool she often waited for eight or nine days

before having an operation at all. There were present at this operation Drs. Moses, Carson and Glasgow, and they all agreed that it was not a favorable one. What was wonderful in this case was the remarkable rally of the patient. She recovered from the operation and was better than she had been for months. Her bowels move regularly and the pains which she had suffered prior to the operation have been modified to such an extent that she is now comparatively well. She is still under treatment by curetting and application of zinc. She is able to go out now and attends church.

Dr. Tuholske congratulated Dr. Carson on his case and the society on having heard the details of it. While it is generally claimed that the operation should only be performed as a *dernier ressort*, he thought that all wrong. When a diagnosis has been made of malignancy we know what will be the fate of the patient, and the operation should be performed, and that as soon as the consent of the patient can be obtained. He thinks the patient should be persuaded to have the operation performed.

Dr. Nelson called attention to a little volume by the late Dr. Willard Parker, of New York, containing a résumé of a long series of very careful studies which he had made upon the subject of cancer, his own observations during his long experience as surgeon, especially with reference to mammary cancer. The conclusion at which he arrives from his careful study is that the element of heredity has very little bearing upon cancer and that, in his opinion, luxurious living and influences which surround people living in civilized society, and more particularly in a state of advanced civilization, are very potent influences in the development of cancer, and he believes that the surgeon who stops with the operation does not do his whole duty.

Dr. Holland said that in detailing the operation Dr. Carson spoke of having cut the broad ligaments near the body of the uterus. He did not understand the reason for that. The disease in this case was in the fundus of the womb; the broad ligaments, of course, are attached to that portion of the womb which had become very much enlarged, showing that the whole tissues, or at least one side of the womb was involved. Now the teaching of the authorities usually is that in such a case the broad ligament or some of the contiguous ligaments will also probably be involved; and since the Fallopian tube itself runs directly from the cavity of the uterus through the fundus of the womb, the proper and

safer course to pursue would be to ligate the broad ligament as far from the uterus as possible.

Dr. Carson said that the ligatures were placed near the ovaries, as near as possible; on the right side the ligature even included the inner end of the ovary. The reason that the ligaments were divided as close to the womb as possible was to prevent any slipping, of which there is very great danger, and which very much adds to the difficulties of the operation. The parts external to the ligature all slough off, so that if there is any disease on the outside of the ligatures it disappears subsequently to the operation and before the healing of the parts. It is thoroughly destroyed by the constriction of the ligatures. The parts external to the wire ligature on the left side separated in thirteen days after this operation, on the right side in sixteen days, leaving a perfectly clear granulated surface; and when the patient left the hospital the roof of the vagina had entirely healed over and was perfectly well. As to the time of operating he certainly agreed with Dr. Tuholske, that when the diagnosis of cancer of the body of the uterus is made, if, after stating the case to the patient she is willing, the operation should be done forthwith; but if the disease involves other parts of the organ that can be removed by less radical means, he thinks that those means should be resorted to before the operation of complete extirpation is undertaken, as we see by the reports of the result of the less operation that the death-rate is only nine per cent., while the death rate of extirpation is twenty-seven and some decimal per cent. and it is also proven by the results that they are equally as good as from the complete extirpation of the organ.

AMERICAN GYNECOLOGICAL SOCIETY.

This society of specialists held its Tenth Annual Meeting at Washington, September 22, 23 and 24, 1885, Dr. Wm. T. Howard, of Baltimore, presiding.

Dr. Samuel C. Busey gave an appropriate address of welcome and also read a paper entitled "The Natural Hygiene of Child-bearing Life." He deprecated too early pregnancies. The age of greatest safety of pregnancy coincides, he says, with the age of greatest fecundity. The age of nubility should correspond with the age of maximum fecundity, fertility and minimum mortality, viz., in

the first quinquennium. First pregnancies are most dangerous, and the dangers are increased by too early and too late primiparity.

He next discussed lactation and the menopause. In this country, especially among the upper classes, precocious matrimony seems to be increasing, a fact which he deprecates.

Dr. Chadwick said that in over four thousand cases which he had observed, American women menstruated earlier than those of other nationalities in this country, and American women of American parentage menstruate earlier than those of foreign parentage. He was inclined to the opinion that the menopause appears later in American women, though he had not enough observations on this point to warrant positive assertion.

Dr. J. P. Reynolds agreed with Dr. Chadwick and was of the opinion that women of the upper and middle classes in America menstruate earlier than they did twenty-five years ago.

Dr. Henry J. Garrigues, of New York, read a paper on "Puerperal Diphtheria." This was based upon a study of twenty-seven cases treated in hospital and two in private practice, and gave a very full and complete description of the disease, which in many of the text-books is not mentioned at all. He recommended an occlusion bandage, a pad wet with sublimate solution, oiled muslin, dry absorbent cotton, etc.

Dr. Lusk stated that ten years ago he had treated one hundred and fifty cases of this disease with twenty-eight deaths. He favors the use of corrosive sublimate injections post partum.

Dr. H. P. C. Wilson objects to bandages of all sorts, has napkins laid under the patient, not interfering with free flow of discharge, and uses frequent antiseptic vaginal washings.

Dr. Richardson had had many cases in the hospital and the success in treating them had not been at all satisfactory until he had adopted the practice recommended by Dr. Garrigues in a former paper on the same subject, viz., the use of the pads and of sublimate solutions for the hands of nurses and attendants, since which the hospital has been almost free from the disease.

Dr. Garrigues thought the experience of Drs. Richardson and Lusk would lead others to try the occlusion pad. He gave statistics showing the diminished mortality following the adoption of the new mode of treatment in the hospital where his observations were made.

Dr. Joseph Taber Johnson, of Washington, reported "Four Cases

of Oophorectomy." He referred to the importance of an early diagnosis in order that the operation may be performed before the formation of adhesions, and before the general condition is too much depressed. He thinks that lives are lost now from prolonged operations on account of numerous adhesions which might be saved by early diagnosis and prompt operation.

Dr. R. S. Sutton spoke in favor of exploratory incisions.

Dr. W. H. Baker, of Boston, thought there was danger of oophorectomy being performed too often.

Dr. Emmet thought more harm than good had been done by the operation. Yet there were cases where it must be done. He opposes exploratory incisions.

Dr. Lusk had operated four times where there was distinct evidence of disease of the tube.

Dr. Jenks thought it wrong to operate in many of the cases of so-called hystero-epilepsy.

Dr. Reamy thought many cases were relieved better by proper treatment and change of patient's surroundings than by operation. He said it was an exception to find a healthy ovary in a woman over forty.

Dr. Emmet thought the operation inadmissible for dysmenorrhea, which he regarded as a neuralgic condition.

Dr. Mann held also that dysmenorrhea is neuralgic, yet thought the disorder might become so firmly seated as to be ineradicable, except by removal of the affected organ. He had seen two cases in which the operation seemed to be indicated.

Wednesday the president, Dr. W. T. Howard, gave his annual address, in which he described "Two Rare Cases of Abdominal Surgery." The first was a case of fibro-cystic tumor of the uterus in a negro woman twenty-four years old. The other was a cyst with numerous strong adhesions, and which it proved impossible to remove, and the exact nature of which was not ascertained. Both cases terminated fatally.

Dr. Emmet said that as he grew older and more experienced the less positive was he in diagnosis. Whenever a woman had an abdominal tumor she had something that should be removed, and he accordingly favored exploratory incision.

Dr. Goodell said that he had removed tumors the nature of which he does not yet know. He felt more and more the importance of the exploratory operation.

Dr. Reamy read a paper on "The Care of the Perineum during Labor." His method is as follows: During the early part of the second stage the patient is allowed to assume any position she chooses, but when the head begins to distend the perineum she is placed across the bed with the limbs in the lithotomy position, except that the knees are kept close together, and are held in that position by two assistants. A piece of muslin or a towel ten inches wide and forty or fifty inches long is carried around the buttocks of the patient and over the hemisphere produced by the bulging perineum, with the upper edge on a level with the fourchette, and the ends are given to the two assistants who are to make traction during the pains as the accoucheur directs. The force may be applied in any required direction, but care must be taken that the pressure is equally distributed and that the assistants do not simply pull on the middle or back part and leave the anterior part lax.

Dr. Mann thought this method would be good in some cases, but in others would not avail.

Dr. E. Wilson had tried every other method. He now generally simply tells the woman to open her mouth during a pain and to pant.

Dr. E. W. Jenks reported "A Case of Cesarean Section" on a woman twenty-seven years old who had a deformed pelvis, resulting from a fracture of the ilium. The head could not be made to descend even after craniotomy. The Cesarean section was then determined upon and was made twenty-four hours after labor commenced.

The woman did well until the third day, when, in the temporary absence of the nurse from the room, contrary to orders, she got out of bed. She felt something give way, had severe pain, and died in a few hours.

Dr. A. J. C. Skene thought this would have been a good case for laparo-elytrotomy.

Dr. E. Wilson then read a paper on "The Use of Tarnier's Forceps." In 1881 he had offered a number of objections, chiefly theoretical, to the use of this instrument. He now desired to record the result of some practical experience in nine cases which had led to a change of opinion in this regard.

Dr. Mann said he had used the Tarnier instrument for the last two years with, in the main, excellent satisfaction. In one case of

deformed pelvis the child had been injured by the forceps, the outer edge of one orbit being crushed in and the eye destroyed.

Thursday. *Dr. Sutton* described "A Modification of Emmet's Cervix Operation" which was discussed by Drs. Goodell, Skene, Engelmann, Mann, Baker and the President.

Dr. Goodell's paper was entitled "Inflammation of the Parotid Glands Following Operations on the Female Genital Organs." He had seen parotid bubo follow ovariotomy where septicemia had taken place. It had occurred once in one hundred and fifty-three ovariotomies. The gland suppurated and was opened. The patient died on the twenty-second day after the operation.

In some cases where there was no septicemia there was a transference of irritation to the parotid gland. He had seen this twice after ovariotomy and once after oophorectomy. It had not seemed to interfere at all with the progress of the case. Neither case ended fatally.

Dr. Sutton had lost one patient out of twelve ovariotomies, and she died with this complication,

Dr. J. T. Johnson had seen this complication in one case of ovariotomy which terminated fatally on the sixth day.

Dr. Mann had seen three cases; Dr. Emmet, two; Dr. Baker, one; Dr. Reamy, two.

Dr. J. R. Chadwick read a paper entitled "Peristalsis of the Genital Tract and a New Theory to explain Relaxation of the Vaginal Outlet During Labor." He holds that there is a peristaltic action of the lower part of the genital canal as well as of the Fallopian tubes, and that to this is largely due the relaxation of the outlet.

Dr. Parvin related a case of "Facial Paralysis in the Infant from the Use of the Obstetric Forceps." It disappeared in ten days without treatment.

Several other papers were read by title.

On motion of Dr. J. T. Johnson, a resolution was adopted expressing the sympathy of the society, with Dr. Albert H. Smith, of Philadelphia, ex-president of the society, in his severe and painful illness, and the hope for his speedy restoration to health.

The following officers were elected for the ensuing year: *President*, Dr. T. A. Reamy, Cincinnati; *Vice-Presidents*, Drs. Theophilus Parvin, Philadelphia, Geo. J. Engelmann, St. Louis. *Secretary*, Dr. J. T. Johnson, Washington; *Treasurer*, Dr. M. D. Mann,

Buffalo; *Council*, Drs. F. P. Foster, New York, B. B. Browne, Baltimore; J. C. Reeve, Dayton, O.; R. B. Maury, Memphis.

The following were elected active fellows: Drs. J. B. Hunter, New York; Chas. Jewett, Brooklyn, and W. H. Parrish, Philadelphia. Dr. W. S. Playfair, of London, Eng., was elected an honorary fellow.

The next meeting will be held in Baltimore, Sept. 21, 22, 23, 1886.

National Medical Museum and Library.—The plans have been prepared and the contracts awarded for the erection of the fire-proof building for the museum and Library for which an appropriation of two hundred thousand dollars was made by the last Congress.

There will be a central building with a front of one hundred and twelve feet, and two wings, each with a front of sixty feet. The depth of the wings will be one hundred and thirty-one feet,

The materials will be chiefly brick and iron, decorations of brick and terra cotta moldings and cornices and a line of blue-stone trimming around the building at the height of each story. Other decorative parts will be of galvanized iron. There will be very little wood work about the building, in order that it may be as strictly fire-proof as possible.

The building is promised for occupation in about a year and a half.

A Double Hemato-Salpinx.—Mr. Skene Keith showed this specimen before the Obstetrical Society of Edinburgh, and gave the following history of the case: Mrs. B., age 30, was sent from Glasgow. There had been profuse uterine hemorrhage for seven weeks before operation, and for that time she had been unable to be out of bed. Both tubes were greatly distended with blood, closed, and along with the ovaries were adherent and low down in the pelvis. In addition the pouch of Douglas was filled with old blood clots which had to be sponged out. Although the patient was very weak, she recovered with little trouble, and went home on the twenty-first day. Instead of sponging out the clots, this case might have been treated by washing out the peritoneum with warm water and by draining, as I saw Mr. Lawson Tait do in a somewhat similar case, a fortnight ago.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

General Elections.—Medical Relief Disability.—Parliamentary Honors.—Asiatic Cholera.—Imposition upon Insurance Companies.—Nerve Stetching.—Changes in the Spinal Cord.—Fatal Results.—Electrical Department of St. Bartholomew's—Electrolysis in Urethral Stricture.—Prostatic Enlargement.

London, September, 1885.

During the present autumn, most likely in November, a general election will be held in England. An English Parliament cannot last for more than seven years. It often happens that a ministry is defeated on some important question when it has only been in office one or two years, and then an appeal is made to the country and a general election takes place. On the present occasion the parliament which put Mr. Gladstone into office, has lasted since 1880. Mr. Gladstone resigned at the end of June, having been defeated on some of the details of his proposed budget, and the Marquis of Salisbury took office until a dissolution of Parliament could take place in the autumn.

Since the last general election a large number of new voters have been added to the electorate, including chiefly those belonging to the lower classes, viz., artisans and laborers. The young men of the better educated classes are still in large numbers excluded from the franchise. This extraordinary condition of things will now exist: the hospital gate porters and the porters who carry about the patients and attend on the surgeons will have the right of voting for members of Parliament, while the house physicians and house surgeons, who are usually appointed for a limited time, will have no votes. This anomaly will exist in the hundreds of hospi-

tals and medical institutions throughout England. In addition to this nearly all the medical students in Great Britain and Ireland are disqualified from voting because they are not resident in the same place all the year round. As far as the undergraduates of the universities of Oxford and Cambridge are concerned, an attempt is being made to get their names placed upon the register, but they will be objected to by the liberal party. Several of the resident medical officers of the metropolitan hospitals are also trying to obtain the right of voting. Their claims are also being objected to by the liberal party, as the majority of the educated young men of the country are conservatives.

Another feature of the new Representatives of the People's bill has a medical aspect. The receipt of parochial relief is still as formerly to be considered a disqualification for exercising the franchise, but parochial relief in the form of gratuitous medical attendance is to be excepted. Under the Poor Law System in England a medical man is appointed for every parish in the country to attend the poor in case of illness. These medical officers are paid by the State from the money collected under the head of Poor Rates. The salaries are very low indeed, and hardly sufficient to pay the medical men for their attendance and for the drugs they are expected to supply. It would be merely justice to the medical men to discourage the working classes as much as possible from seeking relief from the rates, but in this matter, as in most others, the interest of the medical profession has been entirely ignored. A voter has now to pay all the just charges made upon him except for medical relief, and the education of his children.

The question to which reference has been made was discussed in parliament under an act entitled "The Medical Relief Disabilities Removal Bill," and it was more or less supported by both parties in the State, as they each are anxious to catch as many votes as they can of the newly enfranchised. The supporters of the bill had one very strong argument in their favor. The poor of the country districts only would have been disqualified, as they in case of sickness have to apply to the parochial authorities for medical attendance if they are unable to pay for it themselves, but in the metropolis and other large towns that possess hospitals and medical charities the poor are able to obtain gratuitous medical relief without becoming chargeable to the rates. It would have been a great advantage to the medical profession if all those in receipt of gratuitous medical

relief from whatever source would thereby have rendered themselves disqualified as voters, and a provident spirit would have been encouraged among the masses, but now every inducement to provide during health for a time of sickness is removed.

Many more medical men than usual are candidates for parliamentary honors. Dr. Balthazar Foster, the President of the Council of the British Medical Association, is a candidate for part of the county of Cheshire. Mr. Erichsen, the eminent surgeon, hopes to represent the combined universities of Edinburgh and St. Andrews. Dr. Benjamin Ward Richardson, the author of "Hygeia," is also a candidate for one of the metropolitan boroughs, and Mr. Ernest Hart, the editor of the *British Medical Journal*, is a radical candidate for a new borough in the east end of London. All these men, who are well known to the medical world, are in politics more or less extreme, and it is very difficult for the great bulk of the profession to support such men, however anxious it may be to see medical interests better represented and cared for in parliament. In all things a man must sacrifice his own personal advantage or the special interests of his own class to what he may consider will be the best for his country.

A veritable case of Asiatic cholera has occurred at Cardiff in South Wales, on board the steamer Carindan. The ship arrived during the first week of the month from Barcelona in Spain and discharged its cargo at Bristol. It was manned by a crew of thirteen Spaniards. The ship was visited by the health authorities at Bristol and received a clean bill of health; it then proceeded to Cardiff, the port to which the ship belongs, arriving there on Thursday, September 3. The crew was then dismissed, and four men were taken on board for the purpose of cleaning the ship and taking charge of her until she should again be chartered. One of these four employes drank some water from a tank in the bulk-head, which had been filled when the ship was in Spain; he was seized shortly afterwards with griping pains, and excessive diarrhea, and, in the course of a few hours, was found dead in the latrine. Another man who also drank some of the water was so frightened that he went on shore and ran away, and has not yet been traced. The body of the man who died was examined by the health officers of the port, and it was declared to be a case of true Asiatic cholera. The ship was immediately towed out of dock and placed in the quarantine station outside the port which has been provided for

such an emergency, and has undergone a thorough disinfection. No other case of cholera has occurred up to the time of the dispatch of this letter.

One of the latest impositions on the medical profession is the following. A gentleman feels doubtful about the condition of his heart. He has felt some pain on the left side of his chest; he is therefore anxious to be examined and to obtain a good opinion as to the condition of his thoracic organs, but he does not like to pay two guineas for it. He therefore offers himself to an insurance company with a view of taking out a policy on his life. He knows that if he has any cardiac disease he will be rejected; but if his life is accepted by the company without any increased premium being added, he knows that his heart is sound. When he has thus effected his purpose and has obtained a good opinion, he declines to effect the insurance. Such is the device which has been frequently practised in London of late. To prevent this sort of thing, all the insurance companies ought to make those proposing to insure their lives pay a preliminary fee of one guinea for the medical examination.

It is very probable that during the next winter session the question of nerve stretching will again be brought before the profession. Since the introduction of the operation in 1872 at least 23 deaths have been recorded as resulting therefrom. The first operation of the kind was performed by Prof. Nussbaum of Munich, who stretched the brachial plexus for spasmodic contraction of the pectoralis major and flexor muscles of the left forearm of a soldier. There was also anesthesia on the dorsal aspect of the left arm. The operation was eminently successful. No spasm returned, the forearm and fingers could be flexed and extended at will, and sensation was restored. In 1875 Mr. Callender stretched the median nerve in a lad for a painful and ill-nourished condition of a stump following an amputation at the wrist. This operation was also followed by relief. When reporting the case in the *Lancet* Mr. Callender asked the question: "Is the cure permanent?" and added, "the experiences of the operation from the few cases in which it has been practised are too recent to enable us to reply to this question." We have now a sufficient number of cases before us to warrant us in reviewing and again considering the whole subject. It would appear from experiments upon the lower animals and from hte results on human beings that stretching the sciatic nerve at

least is often followed by serious myelitis of the spinal cord, and such myelitis is often fatal.

In the *Archives de Neurologie* for July an account is given of the changes produced in the spinal cord by stretching the sciatic nerve. The experiments were made upon rabbits. It was found that the central canal of the cord became distended with plastic exudation, and that there was congestion and capillary hemorrhage into the gray matter, especially in the posterior cornua. There was also proliferation of the nuclei of the neuroglia, and an increase of the connective tissue in the posterior cornu of the side operated on with a disappearance of the nerve tubules. A new net-work of connective tissue begins to be formed about seven days after the operation, and in a month's time there is decided atrophy of the posterior horn on the operated side. There is also thinning of the intra-medullary part of the posterior roots. The nerve cells in the anterior cornu on the operated side are less numerous and show signs of degeneration, and some of them actually disappear. These morbid signs are more obvious in the lumbar swelling of the cord, and they tend to disappear towards the dorsal region.

This being the case, the question arises whether it is justifiable to stretch the sciatic nerve for an affection such as sciatica. The lives of patients suffering from sciatica are not in danger, and nerve stretching is not a certain cure, therefore we should hesitate before performing an operation which might possibly not be successful and which certainly would endanger life. Such considerations, though apparently trifling, are of great consequence to patients, as it is important that they should be assured that though an operation may fail their lives will not be jeopardized. The same argument does not hold good for nerve stretching in tetanus; for tetanus is pre-eminently a fatal disease, and a sufficient number of recoveries have followed stretching of the nerve in the injured limb to justify us in recognizing it as a legitimate mode of treatment. Most of the fatal cases of nerve stretching recorded have followed stretching of the sciatic nerve. Anatomy shows that the cord is not so well supplied with blood in its lower part as elsewhere. This may perhaps explain why it is less able to recover from any serious injury to its lumbar enlargement.

The establishment of the extensive electrical department recently added to St. Bartholomew's hospital is likely to be followed by some useful practical results. During the present vacation, Mr.

Bruce Clark and Dr. Steavenson have been trying the efficacy of the treatment of stricture of the urethra by electrolysis (a plan which has been adopted and followed in America for some years), and have obtained most satisfactory and encouraging results. Several cases have, to all appearances, been cured, with the smallest amount of pain to the patients, and without the use of an anesthetic. Some time, of course, will have to elapse before it can be determined what amount of contraction may follow this mode of treatment. When an idea has been formed on this important point a report of the investigations will be made to one of the metropolitan medical societies.

An attempt has also been made to dissolve the middle lobe of the prostate in a case of prostatic enlargement. Should this plan of treatment also succeed, one of the greatest opprobria of surgery will have been removed. What now is to be done in a case of complete retention from disease of the prostate, when catheterism fails? Temporary relief may be gained by tapping the bladder, but all attempts at radical cure have hitherto been failures. A more extensive use of electrolysis in surgery is likely to prove a most useful addition to the means now generally employed in many troublesome affections. If stricture of the urethra can be so easily cured, we may look to electrolysis as likely to prove the most adaptable and promising mode of treatment for stenosis of the os uteri in cases of dysmenorrhea and sterility; and also in all other abnormal contractions of natural passages. It is satisfactory that the whole subject is being investigated by reliable hands at St. Bartholomew's Hospital.

E. V. A.

Coca and its Congeners.—Dr. O. M. Moore says it has been estimated that coca is used by ten millions of the human race, betel nut by one hundred millions; chickory by forty millions, coffee by one hundred millions: three hundred millions eat or smoke haschisch, four hundred millions use opium, five hundred millions use tea, and all known peoples of the earth are addicted to tobacco.—*Quart. Bulletin of Clin. Soc'y* Aug., 1884.

Malignant Growths invade the surrounding tissues, and in general are to be distinguished by this peculiarity from tumors which displace the adjoining structures.—*Cancer*, by Willard Parker, p. 4.

SELECTIONS.

HOMEOPATH:—WHAT DOES THE WORD MEAN?

By J. C. Reeve, M. D., Dayton, Ohio.

[*Extract from President's Address "The Latest Systems in Medicine," before Ohio State Medical Society Meeting*, 1885.]

"The diversity of homeopathic doctrines shows that the term 'homeopath' does not define a man's position with any accuracy at all. It covers very diverse, even opposite, opinions. This fact has an important bearing upon the medical politics of the present. You know that our sister society of New York has been divided upon the question of consulting with homeopaths. It would be well for us, therefore, as long as this question remains a possible one for this and other societies to consider, to understand as clearly as possible what the term 'homeopath' implies.

"It includes, at least, three distinct and well-defined classes: A few homeopaths are Hahnemannians. At the meeting of the New York Homeopathic Society in 1883, three acknowledged themselves to be such out of sixty present. According to the *British Medical Journal*, the real homeopaths of Great Britain can be counted on the fingers of a single hand. With this portion of the sect it is impossible to consult. You cannot reason with a man who maintains that a part is greater than the whole. These are intellectual cranks.

"A considerably larger portion of the sect is made up of those who have been educated in all the branches of medical science, who practise in good faith according to the law of similars, but who are bound by no rigid rules as to dose. This class is more numerous in Eastern cities than here. It is large enough to have an organ [*Medical Times*]. This journal carries at its head this extract from our code of ethics: 'A regular medical education furnishes the only presumptive evidence of professional abilities

and acquirements, and ought to be the only acknowledged right of an individual to the exercise and honors of his profession'; and this: 'Our practice is *not* based on an exclusive dogma, to the rejection of the accumulated experience of the profession, and the aids actually furnished by anatomy, physiology, pathology, and organic chemistry.'

"These men comprise the best of the sect. They support medical legislation to establish boards of health and insure to the public educated physicians. They are on their way back to the ranks of the profession; they are dropping their distinctive appellation, and certainly no obstacle ought to be placed in the way of their return. It is folly, and worse, to call them charlatans and quacks. They are men who exaggerate the value of the law of similars, and the efficacy of the small dose. There is room for honest difference of opinion as to the range of the law, and it will not do for men who use 'Ringer' as a text-book to be too particular about small doses. These men are but little further from the general line of practice than many of our number who ride 'hobbies,' who appear so frequently in the journals with new and wonderful modes of treatment of diphtheria, scarlet fever, or of some other epidemic they have passed through. We smile at the enthusiasm of these men; we recognize their error to be the same as that of the system makers, generalizing from a few facts; we glean from their bushel of chaff the few grains of truth there may be; we do not cut them off from professional fellowship. We ought to treat as professional brethren all men who have been educated in medicine, who are honorable in conduct, who elevate the profession above any of its sects; who are honestly trying to advance our knowledge, and to cure disease and alleviate suffering, whatever may be their methods.

"The majority of homeopaths are unfortunately of quite another character. They have adopted this line of practice for whatever there may be of popularity in it, and they pursue their calling in the sole spirit of trade. Shall I be charged with slandering my neighbors? Hear what the *Medical Times* says. It has dropped the distinctive title of 'homeopathic,' and advises others to do the same: 'We are as confident as we can be of anything that many use the term from mercenary motives, and that it is in many instances only a trade-mark!' The editor says further that the reply to this advice always is that practice would be lost in doing so: "With

this fact in view, how can we reach any other conclusion than that the title is retained for the purpose of business?' In plain English this means that they are obtaining money by false pretenses. These are the men who have kept bright the spirit of the founder—hatred of the regular profession. They habitually indulge in the grossest misrepresentations of regular practice, and play upon every prejudice which exists, or which they can excite, in the public mind. They sneer about 'drugs.' It is a good word to use; it sounds like *dregs*, and dregs mean dirt. They boast much of using 'pure medicines,' thereby conveying the slander that others are not careful about the quality of the chemicals they administer. They instil into the minds of their patrons the fear of 'strong medicines,' and, while doing so, deal out '*lachesis*' (serpent venom) and '*crotalus*' (the poison of the rattlesnake)—medicines which are too strong for our pharmacopeia. They emphasize the single-medicine doctrine while dispensing several different kinds to be given at intervals of ten or fifteen minutes. These are the men who prate of being the 'advanced thinkers' of the age, implying that no one else is trying to extend the knowledge of cure of diseases, while they bitterly oppose all efforts to enforce thorough medical education. These are the men who, to prevent the establishment of boards of health, go to the public and whine about 'class legislation!' These are the men who are homeopaths in one house, and in the next are anything that will suit. With these men we can not consult. We want a basis of common honesty, at least, to say nothing of that dignity and education which should attach to a profession which deals with the dearest interests of humanity. We must treat them as we do those of our own practice who, with unblushing impudence, placard the walls and fill the columns of the daily papers with boasts of their superior skill and false statements of cure.

"But all members of our profession who advocate consulting with homeopaths may set their minds at rest. The homeopaths do not want us to consult with them. When we decline to meet them, there is a loud outcry about professional intolerance and bigotry and persecution. But during this great movement in the State of New York to terminate this schism and bring about common consultations, not a motion in its favor was made on their side of the house. I have looked carefully through the files of their journals, but failed to find one word of friendly advice. Of course, schisms and sectarianism do not elevate medicine, or in

crease respect for it, any more than they do religion. It were better if this division was closed. But, judging from the spirit of the times, it will be a long time before this sect disappears. The better portion of the homeopaths make no organized effort toward reunion; those who ply it merely as a money-getting calling will never leave it as long as principles and prejudices exist in the human mind which make it profitable."

ON CERTAIN VASO-MOTOR DISTURBANCES OF THE NASAL MEMBRANE.[1]

By William C. Glasgow, M. D., St. Louis.

For a number of years my attention has been attracted by a series of cases which could not be explained by the well-known factors of inflammatory process. Resembling them in some particulars, still there are differences which necessitate an additional and independent influence for their production. The laws of vaso-motor action, although still imperfectly developed, would seem to explain them, and the success attending the use of therapeutic agents would seem to verify it. During the last few years the subject of vaso-motor disturbances of the nasal membrane has been very fully developed by several members of this society, and especially by Dr. Mackenzie, of Baltimore, Dr. Roe and Dr. Daly, and our co-laborer, Hack, of Freyburg. I find, however, that my experience of these cases has been somewhat different from that of my *confreres*, and I would aim in this paper to record my views and the conclusions which they would seem to justify. For a number of years my attention has been attracted by a series of cases characterized by great swelling, more especially of the cavernous tissue, a profuse discharge of limpid fluid, and abnormal paleness of the mucous membrane. Formerly, when they occurred during the summer months, I was content to consider them as modified types of so-called hay fever. When, however, I found they occurred during the year irrespective of seasons, I became convinced that there was a different agency from that then recognized as an essential factor in hay

1. Read before the American Laryngological Association, June 24, 1885.

fever, *i. e.*, the pollen of Wyman, Blakley and Phœbus. Dr. Beard's work first attracted my attention to the possibility of a neurosis being the chief factor in the disturbance, and gave me my first ideas of what I considered to be the true theory of these cases. Considering the so-called hay fever to be a functional disorder of the nervous system, in which the over-sensitiveness of the nasal mucous membrane occurs, and producing through this certain well-known reflex symptoms and disturbances of the normal vaso-motor action, I can still consider these cases as closely allied, both in etiology and mechanism,with the so-called cases of hay fever. From a number of cases I have selected three, showing the distinct and different types of nasal disturbance. I would eliminate from consideration another class of cases in which we find neuralgia, especially orbital, supra-orbital, and frontal, occurring as a result of subacute rhinitis; although having many of the pathological conditions found in Case II, still there is wanting the primary neurotic element capable of producing the vaso-motor disturbance.

Case I.—I. W., an Englishman, a merchant, forty-five years of age, was brought to me for consultation by his physician. He was of stout build, somewhat florid, and had been generally healthy. He was suffering acutely with a neuralgia of the superior maxillary nerve of the left side, and complained of great obstruction, with a profuse flow of a clear watery fluid from the left nostril. He stated that this had only commenced with the neuralgia, and had been constant. On examination, the left nostril was found occluded by a swelling of the cavernous tissue; the mucous membrane was colorless in appearance, and seemed to be saturated with moisture which constantly oozed from its surface. The touch of the probe produced instantly an increase of the swelling and an increase of the discharge of the limpid fluid. The right nostril was normal and unobstructed. He was treated by his physician for the neuralgia, and received no local treatment. With the subsidence of the neuralgia the nasal disturbance disappeared.

Case II.—Mrs. P., thirty-two years of age, well developed, healthy, of a nervous temperament, and inclined to hysterical attacks. Has had three children; married eight years. Three years ago she noticed a nasal trouble for the first time, although for many years she had been suffering with follicular pharyngo-laryngitis and naso-pharyngitis. Her first attack occurred during pregnancy.

and has been repeated at irregular intervals about four times a year. There is no special dependence upon atmospheric conditions. The attacks usually occur at the beginning or at the close of the menstrual epoch. The first symptom is a violent sneezing, occurring in paroxysms, with a profuse watery discharge from the right nostril. This is soon followed by an intensely painful spot in the right nostril, and by neuralgia radiating to the eye and the frontal region. Congestion of the conjunctiva, lachrymation and ptosis of the right lid soon follow. The right nostril becomes completely closed, especially toward evening, and there is generally accentuation of all the symptoms. The attack is accompanied by slight fever, with general lassitude and loss of appetite. There is also increase of the general arterial tension, as shown by the pulse, and pronounced accentuation of the second sounds of the heart. About the third day a plug begins to form in the nostril, which completely prevents the passage of air. The plug is of a dense structure. It is elastic and solid, and resembles no other nasal secretion that I have seen. It resembles somewhat a piece of rubber, and the elasticity is well marked on tearing it. The nostrils are now completely occluded by the swollen membrane and the plug, and the probe can only be passed by force. With the removal of the plug relief is given. The walls become less swollen and the nostril opens. During the next twelve hours another plug forms, and we find a renewal of the same symptoms, only in a moderated form. Without treatment this condition lasts ten days, with paroxysms varying in intensity and gradually diminishing toward the end. The nostril is then found in the normal condition, which is that of hypertrophic rhinitis. During the attack the mucous membrane is swollen and edematous, pouring out quantities of limpid fluid. It is of a pale red, the pallor being in marked contrast to the color of the other nostril. It shows complete occlusion of the nostril, and it is exquisitely sensitive. The slightest contact of the probe causes increased swelling and profuse discharge, with violent paroxysms of sneezing; intense pain is felt radiating from the nose to the orbital and supra-orbital region, and immediate congestion of the conjunctiva is produced. Relief of this condition is most marked by bleeding the opposite nostril. The slightest touch of the knife produces a free hemorrhage. The touch of the knife to the affected membrane increases the symptoms, and little blood is obtained unless the puncture is deep into the cavernous body. The

blood is always pale and watery. The bleeding is then followed by the use of the hot alkaline sprays. By these means the swelling is reduced and the plug can then be blown out. I have also found the insufflation of the vapor of ether to have a very happy effect in promptly reducing the swelling and drying up the mucous membrane; the nitrate of amyl has also produced good effects.

Case III.—Miss S., thirty years of age, healthy, in excellent general condition. Has periodical attacks in the spring and fall of what she calls acute catarrh. When I saw her in March she complained of great obstruction of the nostril, and profuse watery discharge of both nostrils. On examination, both nostrils were found to be occluded by swelling of the cavernous bodies, the mucous membrane edematous, of a pale color. A watery secretion seemed to be oozing from the mucous membrane and the discharge was profuse. The touch of the probe increased the swelling and the discharge, but produced no pain. A deep puncture in the cavernous body produced a slight hemorrhage, the blood being very pale and watery. This always opens the nostril. Insufflation of the vapor of ether gave a certain amount of relief. The instillation of atropine into the nostril was also beneficial, as well as inhalations of camphor. These attacks would last about two weeks, and were always shortened by treatment, and the nostril would be left in a normal condition. In this case I found great benefit in the external use, in the shape of liniments, of the camphor chloral, aconite and veratrine. This liniment was applied to the course of the fifth nerve and over the nose.

These three cases, though resembling each other in some respects, will be seen to be essentially different. In Case I we see the effect on the mucous membrane, the irritation being applied to the body of the nerve. In Case II we notice the effect produced by the irritant being within the nasal cavity in a case complicated by inflammation of the membrane. We find added to the original symptoms extreme sensitiveness and the tender spot with acute pain. The presence of the plug causes a swelling of the cavernous bodies, the swelling only subsiding on its removal. Case III is to me obscure. I have seen several such cases, some of them absolutely resisting all treatment for the reduction of the swelling. It may be due to some derangement of the vaso-motor centres, or some irritation within the nasal canal which has been overlooked. In the three cases, and in all of this character which I have seen,

there are found the three factors of great swelling of the cavernous bodies, abnormal paleness of the mucous membrane, and profuse discharge of the limpid fluid. And in all these cases these symptoms are aggravated by an application of an irritant to the affected membrane. These conditions I will consider to be due to disturbed nerve action, probably altered tone in the minute arterioles produced by derangement of vaso-motor control. The mechanism which causes the swollen and edematous tissue, the pale color of the membrane and the profuse discharge must be explained simply on theoretical grounds; and, in the present state of our knowledge of vaso-motor action, it must certainly still remain problematical. Are the cavernous bodies congested, as has been asserted? Congestion presupposes a dilatation of the blood-vessels, with increased supply of normal blood. Under such conditions we shall find, not pallor, but increased redness. The prominent feature, however, in these cases is pronounced paleness, and this, in my opinion, disproves the possibility of dilatation of the blood-vessels. I would rather assume the opposite condition to exist—a contraction of the arterioles, due to an increased tone of the vessels caused by an augmented action of the vaso-constrictors. In short, the minute vessels supplying the arteries are in a state of spasm through nerve irritation; the general arterial tension is increased; the onward flow of the more solid portions of the blood is prevented, and the cavernous bodies of the mucous membrane becomes infiltrated with escaping white corpuscles and the liquor sanguinis. To these must be added the liquefaction and the increase of the glandular secretion, as the result of gland stimulation. The theory of spasm of the arterioles is supported by the favorable action of remedies which favor arterial dilatation—such as atropine and nitrite of amyl. In the present state of the knowledge of the laws of vaso-motor control it certainly is hazardous to base a theory on such laws. But the conditions existing in the nasal cavity seem to me to be explained solely by this means. I firmly believe that, whenever the laws governing the vaso-motor system shall be more thoroughly developed, we shall find more of the functional disturbances of the body to be due to disturbed vaso-motor action than is generally believed.—*N. Y. Med. Journ.*, June 24, 1885.

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ORIGINAL ARTICLES.

PUERPERAL ECLAMPSIA.

BY A. E. GORE, M. D., PARIS, MO.

[*Read before Moberly District Medical Association, October* 20, 1885.]

GENTLEMEN of the Association: As the duty has been assigned me, by our worthy president, of reading an essay at the present time, it has occurred to me that I could probably as well entertain and possibly profit the association by writing on puerperal eclampsia, as on any other subject, first, because it is universal in its prevalence where women are married and children are born; second, because it is the gravest complication of the puerperal state, and, thirdly, because we are all physicians liable to be called at any moment to treat this complication.

Puerperal eclampsia, according to most of the authors I have examined, may be divided into three varieties—the hysterical, epileptic and apoplectic. By far the most frequent variety is the epileptic, and as nearly all the cases resemble in their outward symptoms epilepsy or apoplexy, and, moreover, as we find a full description of them in our text-books, I deem it unnecessary to enter into a detailed description of them. The frequency of this disease is about one in four hundred confinements.

Its fatality is one in three or four cases. Thus Churchill gives 152 cases with the loss of forty-two mothers; Velpeau and others 109 cases with the loss of fifty mothers. Rosenthal says the mortality varies from thirty to eighty per cent. This shows a greater relative mortality than we have in small-pox or even Asiatic cholera.

Women from five months in pregnancy up to and after their delivery are liable to be seized with eclampsia. In very rare instances eclamptic attacks have occurred a few weeks after conception. By far the most frequent time of attack is during the first and second stages of labor.

An interesting and important question connected with all cases of eclampsia is its cause or causes. The proper solution of this question in each individual case is a sine qua non to a rational course of treatment. If we are ignorant of the cause we strike in the dark and may aggravate rather than ameliorate the violence of the spasms. All authors divide the causes into predisposing and exciting. Thus far they agree; when, however, they begin to specify the predisposing causes they divide into two or more classes.

Old authors and some of recent date are unanimous in the opinion that the increased nervous excitability engendered by the puerperal state is the chief predisposing cause of eclampsia. The late Dr. Hodge, of Philadelphia, strongly advocated this view. He says, "The *natural* exaltations of the nervous and vascular systems and the disposition to plethora constitute the predisposing causes of puerperal convulsions."

"The correctness of this opinion is, we think, sustained by the whole history of puerperal convulsions, and forms the best foundation for those principles which will be the surest guide to the practitioner in his contest with this frightful malady."

Cazeaux, Braun, Frerichs, Rosenthal, Lever, Simpson and the most of recent writers reject this view, and attribute all cases of puerperal eclampsia to acute granular nephritis, whereby a superabundance of albumen is separated from the blood and the urea retained.

According to the observations collected by Braun, at the Vienna Maternity Hospital, there were forty-four cases of eclampsia

in 24,000 confinements. Albuminuria was present in all these cases. From the number of high authorities who testify to the uremic origin of eclampsia, I am persuaded that it is one, at least, of the chief predisposing causes of this disease, and possibly more often precedes a fatal termination than any other cause. It is said that cases occur in which there is no albumen in the urine, and post mortem examinations reveal no disease of the kidneys.

Another fact is that ninety-five per cent. of the cases of eclampsia occur in primiparæ. This would indicate to my mind that the increased nervous and vascular excitability has far more influence as a predisposing cause of eclampsia than most writers admit. Especially does it so appear when we take into account the vast number of multiparæ who have albumen in their urine, but rarely have eclampsia.

Again, if acute granular nephritis or Bright's disease precedes and accompanies all cases of eclampsia, it is marvelous that they convalesce so rapidly after delivery; for we have all been taught to regard Bright's disease as one of the most dangerous and difficult to cure with which we have to contend.

Among the exciting causes may be mentioned powerful "mental or moral impressions, vigorous contractions of the womb rendered inefficient by some obstacle, rigidity of the cervix, pressure of the child's head on the obturator and sciatic nerves," uncomfortable surroundings of the patient, extreme heat or coldness of the room, the bunglesome use of forceps, "meddlesome midwifery," etc.

It is not often the case, situated as the most of us are, doing a country practice, that we can observe the prodromata of eclampsia; for, as a rule, we are not called till confinement is imminent, or, if before, till the eclamptic attack has occurred. According to Verrier, one of the surest signs is a violent supra-orbital headache, beginning a few days before the attack, accompanied by nausea and vomiting, also vertigo, flashes before the eyes, ringing in the ears and deafness.

Post mortem examinations in the majority of instances have been very unsatisfactory and have thrown but little light on the pathology of this disease. Occasionally effusions of water into

the ventricles of the brain and blood on the surface are seen. According to Braun edema of the lungs and brains and granular nephritis are constant pathological conditions.

As is the case in all grave disturbances of the system, the most important question for consideration is the proper treatment of eclampsia.

In the first place let us briefly consider preventive measures, for according to the old and homely adage (and none is more true) an ounce of prevention is better than a pound of cure. If the symptoms are such as described above as prodromata, we should not in the majority of instances hesitate to bleed and use other antiphlogistic remedies to reduce plethora. I can well remember when it was a very general custom to bleed pregnant women for their aches and pains, a practice often much more rational than that of heavy doses of quinine after delivery, as taught in some of our schools.

At the same time the nervous system should be quieted by hydrate of chloral and bromide of potash. I have used the hydrate of chloral for the last fifteen years or longer, and for quieting nervous disturbance and preventing threatened spasms both in children and women it is superior to any therapeutic agent I have ever used, and at the same time as little dangerous; for I have never seen an unfavorable effect from its use.

Proper attention should also be directed to the secretions. If albumen is abundant in the urine and the limbs are swollen, this should receive strict attention. In this connection, gentlemen, permit me to suggest that it would be prudent and safe in all instances where our services have been engaged with a primipara to impress it on the mind of her husband, if at any time there should be swelling of the feet and ankles to notify us at once of the fact, that we may treat her for this trouble, thereby preventing a greater. If, as many of our best writers maintain, albuminuria is one of the chief causes of eclampsia, it is of the first importance that we meet and treat it beforehand. One of the most interesting and lovely ladies of all my acquaintance recently fell a victim to the negligence of her medical adviser in failing to meet and combat in time this warning. She was enormously swollen and this condition continued without medical aid to the

time of her confinement, when she was taken with violent convulsions, speedily terminating her life. Dr. Tarnier, in charge of La Maternité Hospital, in Paris, has for years given a milk diet to women whose urine contained albumen. In all of his cases albuminuria has disappeared or rapidly diminished, and convulsions have never occurred. The quantity of milk taken is increased from one to four quarts a day, other articles of diet being rigidly restricted. From the very high authority whence this recommendation comes, it is well worthy of our attention and trial. Dr. Hodge urges in all cases the importance of a light diet for some weeks before confinement, meats of every kind being entirely prohibited.

In the next place let us consider the treatment of eclampsia occurring before confinement. The eclamptic attack may take place as early as five months after conception. In cases occurring so early in pregnancy it is evidently the duty of the physician to use all means at his command to relieve the convulsions without inducing premature labor, for the life of the child should receive some consideration as well as that of the mother. Under judicious treatment the convulsions frequently cease, the child is carried to full term and both mother and child live.

Some authors, however, advise the induction of premature labor as speedily as possible, on the theory that a living child in the womb is an exciting cause of convulsions and that they will not cease till it is removed.

Those who contend thus seem to fail to remember that convulsions at term most often continue after delivery, and at least in one case out of three or four to a fatal termination. They also fail to regard our moral code, which says, "Thou shalt not kill." What moral right have I to slay a child unborn more than one that walks the earth? Here is a child in utero wholly incapable of defending itself or maintaining its right to live, which it is proposed to kill, slay or sacrifice, on the mere presumption that the chances of the mother to live may be enhanced thereby. Let us examine this question for a moment, and we may possibly find that two lives are often sacrificed to a mere presumption. "The uterus is quiet, there is no contraction of the fibres, and no reflex influences on the spinal marrow and

brain." Let premature labor be attempted. The os uteri must be forcibly dilated, the womb must by unnatural means be teased into premature contraction, the child's head must come in contact with and press upon the cervix. The sensitive surfaces of the vagina and perineum must be put upon the stretch before they are prepared for it. The forceps must be used in a rough and clumsy manner. This whole process is fearfully exciting and unavoidably intensifies the violence of the convulsions. It almost unnecessarily sacrifices the child, and I am firmly persuaded kills far more mothers than the convulsions would, if subjected to a palliative treatment, or even left to the unaided efforts of nature. There are possibly extreme cases in which we would be justified in resorting to operative measures, but they are extremely rare. Permit me in this connection to read from an article in the *Med. Times and Gaz.*, Sept. 1882:

"Dr. Fr. Schauta, assistant in the clinic of Prof. Spaeth, of Vienna, gives statistics based upon the large number of 134,345 labors, among which 344 cases of convulsions occurred.

Convulsions coming on during pregnancy quite as often, according to Dr. Schauta, persist during labor, as cease before that process begins. The commonly received opinion that convulsions first attacking the patient during labor commonly cease when delivery is complete, Dr. Schauta finds to a great extent negatived by the facts he has collected.

The practical point, says Dr. S., which springs out of these results seems to be this, that in labor complicated with convulsions the accoucheur should not allow himself to be persuaded into operative delivery unless the clearest indications exist and the necessary conditions are present; and that the accouchement forcé, now on other grounds rightly abandoned, should, looking at the prognosis of puerperal eclampsia, be unconditionally condemned. Out of the forty-two cases of convulsions occurring during pregnancy, twenty were delivered spontaneously, twenty-one by the help of the accoucheur (one passed from observation undelivered). Of the former, two died, or ten per cent. Of the latter fourteen, or eighty-seven and one-half per cent. This does not include five children of the latter class, which were delivered by Cesarean section after the death of the mother.

Dr. Schauta's cases show this—that there is no such immediate advantage as to justify us in running any risk of other dangers for the sake of speedily ending the pregnancy. If labor has begun, or if it has been induced, it is best left to take its course with the minimum of interference. In labor, whether induced or at the natural term, such interference as would be called for if there were no convulsions is alone that which is required. "Everything further is submitting the patient to unnecessary risk without any compensating advantage," advice, in my opinion, well founded, sound and true, to which it would be well for us all to give heed. There is a disposition on the part of many physicians, in this as well as other diseases, to ignore the processes of nature and follow their own unfounded theories. The result above mentioned is a telling commentary on their vanity and folly. Nature gives a mortality of ten per cent.; man's theories and practice of eighty-seven and one-half per cent.

By far the largest number of cases of eclampsia occurs during the first and second stages of labor, and the proper treatment to adopt in each case taxes to the utmost the wisdom and skill of the attending physician.

Formerly the teaching and custom were universal to bleed copiously and often, and to pursue the antiphlogistic regimen throughout. This was the rule, and few men had the temerity to violate it. Since it has been ascertained that uremia is one of the chief causes of convulsions, venesection has been by many eminent men condemned and wholly abandoned, on the ground that blood-letting weakens and prostrates the system, impoverishes the blood and increases the uremic poisoning. Time, however, with its attendant experience, has proven that the path of safety lies equally distant between these extremes. It is now conceded even by many of the strongest advocates of the uremic theory, that venesection will, at least occasionally, ameliorate the violence of the spasms, calm the system and prevent the profound coma which is an evidence of extreme congestion or effusion, and too often the signal of approaching death.

Even Rosenthal admits that in intense cyanosis, vigorous pulsation of the carotids or in patients with a vigorous constitution

venesection may do good by preventing cerebral hemorrhage. Verrier says in the beginning of an attack we still may bleed. This, he says, though not checking an attack, prevents cerebral and pulmonary congestion and apoplexy, the great desideratum of all who treat this disease, for if we can prevent these in nineteen cases out of twenty we will save the life of our patient.

Belgian physicians, following Van Heuvill, bleed often and apply leeches to the spine. It is not pretended venesection is curative. It is rather a preventive measure. The great danger in all cases of eclampsia is fatal congestion of the brain and lungs. Venesection, more effectually than any other means, prevents this danger by relieving plethora. Dr. Tyler Smith, a strong advocate of the theory of toxicemia, says bleeding must be immediately employed. Cazeaux affirms it should have precedence over all other remedies. Dr. Ramsbotham, jr., calls it the sheet anchor of the practitioner. Dr. Gooch declares he never lost a patient where free blood-letting had been resorted to. Dr. Hodge after a long experience declares it the chief remedy in the hands of a prudent physician.

I deem it unnecessary further to refer to authorities, for these are accessible to all, and can be consulted at our leisure; I desire, however, briefly to speak of my own experience, though limited, in the treatment of eclampsia.

Case I. —In the winter of 1849 I was called to see a lady 40 years old in her seventh confinement. She was quite a fleshy and robust woman. Labor proceeded favorably up to the second stage when she had a violent convulsion. I at once bled her freely. The spasms continued till after the delivery of a living child. She convalesced rapidly.

Case II.—The following year I was called to a negro girl, 18 years old, stout and active, a primipara. She was taken with convulsions in the first stage of labor. I opened a vein and drew a quart of blood. Her labor progressed favorably, though she had several spasms, for the relief of which I administered opiates. She was delivered of a living child and made a quick recovery.

Case III.—Mrs. S., 20 years of age, a primipara, stout though rather nervous and excitable, was convulsed in the first stage of

labor. I bled her copiously. The spasms continued. I administered chloroform. This to some extent controlled her spasms. Labor being protracted and the spasms continuing, we delivered with forceps a living child. After delivery the spasms continued for twelve hours. She finally made a good recovery.

CASE IV.—I visited in consultation with Dr. B., a root doctor, Mrs. J., a primipara, with whom convulsions came on after the delivery of a living child. He was administering santonine and tincture of iron under the impression she had worm fits. I gave her opiates and she soon was convalescent.

CASE V.—In consultation with Dr. Leak, was called to Mrs. S., a primipara, 30 years of age, stout and active. Convulsions came on before the os was dilated. We treated her with chloroform, using near a pound in twelve hours. She was naturally delivered of a living child and did well.

CASE VI.—Mrs. M., 20 years of age, a primipara, delicate, had convulsions in first stage of labor. I bled, gave chloral and delivered with forceps a dead child. Spasms continued after labor. She got well slowly.

CASE VII.—Mrs. B., a primipara, 35 years of age, taken with convulsions in second stage of labor. She was bled and given opiates; spasms ceased before delivery, child lived and mother did well.

CASE VIII.—Mrs. B., a multipara, 24 years old, in charge of Dr. C., was taken with convulsions in first stage of labor on Sunday, child delivered on Monday. I was called to see her on Tuesday. She had not been bled. I found her profoundly comatose and almost moribund. She died shortly after.

CASE IX.—I was called in consultation to Mrs. Johnson, a primipara, 20 years of age, and exceedingly feeble from previous illness. She had been in labor twelve hours, and had repeated convulsions. She had taken as much chloroform and chloral as was prudent. In view of her weakened condition I deemed it not prudent to bleed her, coma being profound. I introduced the forceps, the head not having entered the superior strait, and delivered a living child. She died the next day.

CASE X.—Mrs. S., a primipara, 21 years old, taken with convulsions at seventh month, in charge of Dr. D. was called

to visit her twelve hours after convulsions came on. She was profoundly comatose. We delivered with forceps a dead child. She was not bled and died two days after.

I have given you my personal experience in the treatment of this fearfully fatal disease. All of the cases, five in number, occurring in my own practice were bled in the onset of the convulsions. The mothers all recovered and but one child was lost.

Of those to whom I was called in consultation none were bled; of these two mothers recovered and three died. Three children were born alive and two dead.

The number I have reported is too small, I grant, to establish the necessity of venesection or even its superior advantages. It is in the range of possibilities that the five cases got well in spite of the deleterious effects of blood-letting, and that no course of treatment would have cured the three who died without it. I have no regrets, however, for having bled the five, but have always regretted that the three were not bled as soon as convulsions came on.

If I were called to a case of convulsions to-night and found the patient moderately stout, though I were convinced there was decided uremic poisoning, I would not use the forceps or any other violent measures to hasten delivery, unless independent of convulsions there were other good reasons for so doing; for I would expect thereby to increase the violence of the spasms and produce more profound coma; but such is my faith in venesection in relieving plethora, diminishing tension of the blood vessels, preventing congestion of the brain and lungs, preventing the effusion of serum or blood, that I would in the very onset of the attack bleed most freely.

If spasms continued I would endeavor to control the excitability of the nervous system by the inhalation of chloroform, or the administration per rectum of hydrate of chloral or even the hypodermic injection of morphine. In the single case in which I used chloroform alone to the extent of a pound, both mother and child did well. Dr. Braun, of Vienna, treated sixteen cases with chloroform and acids, all of whom recovered. If coma were profound, free purgation, by injections per rectum, should not be neglected.

I have thus, gentlemen, hastily and imperfectly given you my views, founded partly on my own experience and partly on that of eminent authors whom I have consulted, on one of the most important and interesting themes that can occupy the attention of medical men. I have been engaged in this warfare for near thirty-eight years and have related this evening some of the grandest victories I have achieved, some of the saddest defeats I have endured. Of the former I am proud, for I am convinced I have rescued from the grasp of death human lives. In regard to the latter I regret I did not pursue different tactics. It has always been my habit, unavoidably, to regret my defeats and wish I had made a different disposition of my forces, but generally, on going over the battle ground, I have not been able to find where I could have amended it. In reviewing engagements numbers eight, nine and ten, however, I am persuaded we committed two capital errors, one of omission, the other of commission, which probably lost us the battles. Had we bled in the very onset of convulsions and omitted forcible delivery, the result might have been otherwise.

PERNICIOUS ANEMIA.

BY CHARLES TRUMBULL, M. D., LINCOLN, NEB.

[*Graduation Thesis, University of Nebraska*, 1885.]

BY the term pernicious anemia is meant a peculiar form of anemia distinguished by the extremely lethal course which it pursues, the exceeding profoundness of the anemia, the progressive nature it assumes, and the absence of any sufficient cause discoverable either before or after death. Different writers have applied different names to the disease, according to the views held as to its origin, course, or supposed nature. Thus we have progressive pernicious anemia (Biermer), essential anemia (Lebert), idiopathic anemia (Addison), anematosis (Pepper), myelogenic-pseudo-leucocythemia (Pepper).

The greatest differences of opinion have been held in regard to the pathogeny of this disease, and from this writers have

given various limitations to the field covered by the term pernicious anemia, one of the greatest difficulties being in separating it from those affections accompanied by such profound and fatal anemias, known as diseases of the hematopoietic system. These are leucocythemia (Hodgkin's disease), chlorosis and Addison's disease. The anemia accompanying them, however, is looked upon as symptomatic, i. e., anatomical changes may account for it; while in pernicious anemia we have found no sufficient cause, as yet, for the anemia. Hence, we must exclude from the pernicious form all anemias, no matter how profound, which may be accounted for by some existing lesion. This would include the anemias, often very great, following some malarial affections, the cancerous cachexia, etc.

The history of pernicious anemia is all very recent, and not until described by Addison under the name of idiopathic anemia was its place in the nosology recognized. This was in 1868, in his memoir on the disease of the supra-renal capsules, and the subject was handled in his usual masterly style. Cases answering the description of pernicious anemia have been reported as early as 1823, but Gusserow made the first valuable addition to the literature of the subject by the report of five cases of "extremely fatal anemia in pregnant women." About the same time, 1871, Biermer reported fifteen similar cases under the name progressive pernicious anemia, which it has since retained, though for many reasons Addison's true idiopathic anemia is much preferable. The objection to the term progressive pernicious anemia is, that, although usually progressive, it is not invariably so, but has in some reported cases presented well marked remissions, which even led the physician to believe a cure had been effected.

In considering the anatomical characters of the disease, we must bear in mind that these changes are, so far as we know, the result, not the cause of the disease. The most important changes are in the blood; these are, first, diminution of the number of red blood corpuscles (oligocythemia). The corpuscles themselves are abnormally pale and irregular in size and outline. Most of them are smaller than usual, while on the contrary some are larger than ever found in health. They may be as small as $\frac{1}{3000}$ of an inch in diameter or the largest may be $\frac{1}{2000}$. They

become irregular in outline, sometimes a distinct cup-shaped depression appears in the centre. By some writers the corpuscles have less tendency to form rouleaux. The corpuscles may be reduced to one-fourth or even one-fifth their normal number: yet all the anemic symptoms are not due to this alone, as, at the same time, the amount of hemoglobin in the corpuscles themselves is much diminished.

No increase of the white blood corpuscles is found, and this is a point to be made in the differential diagnosis from leucocythemia. The white corpuscles are found sometimes slightly tinged with red, which may be accounted for by the fact of there being considerable free hemoglobin in the plasma.

This, by some, is held to indicate a great destruction of red corpuscles, especially as they also claim to have found hemoglobin in large quantities in the liver and kidneys; but as it is reduced sometimes one-fourth or less in the corpuscles, their destruction hardly seems necessary.

Particular attention has been given by some writers to what has been called the nucleated red blood corpuscle found in the marrow of some of the bones. They are found only where the marrow has undergone certain changes indicative of a return to the embryonic type. It presents a pinkish appearance. The fat normally present has largely disappeared and is replaced by a substance similar to what is found in the bones of embryos and young infants. It resembles closely that observed in osteo-myelitis, and seems to be another illustration of a principle taught from our chair of practice that "degeneration is the law of disease."

By some these corpuscles are regarded as transitional forms between white and red. This involves a theory of the origin of the red corpuscles which but few accept. The development of the nucleated red corpuscles is not satisfactorily explained, and we cannot determine their use, as they are not found in the general circulation. If they are transitional forms of red blood corpuscles and they are developed in the marrow, then we must admit that the marrow is a hematopoietic organ. This is hardly tenable at the present day, and brings us to one of the most disputed points of the disease.

If we admit that the marrow of the bones is affected in pernicious anemia, how shall we distinguish it from myelogenic-pseudo-leucocythemia? There may be exactly the same clinical history, morbid anatomy and symptomatology. Can we distinguish two diseases under these conditions? I think not; and if we admit the disease myelogenic-pseudo-leucocythemia we must not allow a myelogenic pernicious anemia. But some hold, and quite probably, that a change in the marrow of the bones may accompany any severe form of anemia, and it is not always present in pernicious anemia. Immerman places all such cases under the name myelo-genic pseudo-leucocythemia, making the presence of changes in the bone-marrow, when once determined a pathognomonic distinction from pernicious anemia. This is perhaps the best that can be done until the pathogeny of the disease is brought more to light.

With the changes in corpuscles there are also changes in the blood plasma; the albumen is much diminished without any abnormal appearance of albumen in the urine; there is also absence of sugar. The proportion of fibrine is greatly reduced, so the blood changes in pernicious anemia are much more complex and complete than in other allied diseases.

Accompanying pernicious anemia there is fatty degeneration of the heart often to a great degree; the parts most affected are the columnæ carneæ, and of these the musculi papillares; this will account for some of the symptoms of heart disease which become manifest during the course of the disease. These are palpitation and loud hemic murmurs, and are not due to any disease of the valves themselves, but to the muscular substance which has so much to do with their perfect closure, as can be seen from the anatomy of the heart. Fatty degeneration of other organs, as aorta, liver and kidneys, is observed, but not very constantly.

On opening the principle cavities of the body, usually a considerable quantity of fluid escapes; this is a dropsical effusion and may sometimes be tinged with blood. Edema of the extremities is usually present towards the close.

The appearance of the cadaver is very striking; the extreme paleness resembles that of a person who has bled to death, the

color is waxy, while all the signs of stasis or hypostatic congestion, such as are usually found in the cadaver are absent. There are also present evidences of hemorrhages in various locations in the form of petechiæ, vibices and retinal hemorrhages; or from the nasal or buccal cavities; in women they also may occur from the uterus. These petechiæ are small spots of a blue, brownish or greenish-blue color, while the vibices are in the form of bands or stripes and usually mark where the bed clothes pressed the body; hence, commonly found on the buttocks and shoulders. Rigor mortis is usually very slight and late in coming on; this is common in all profound anemias. One other point in the general appearance of the body, and that is the comparatively small amount of emaciation. The explanation of this is that the blood being deficient in the oxygen-carrying corpuscles, there is much less combustion going on, and hence less destruction of fat. Thus it is we find the bodies of those who have died a slow, lingering death, still presenting a rounded, well nourished appearance. This is sometimes wanting where there has been much febrile action towards the close.

Several writers have described lesions of the sympathetic which, if sustained, will throw considerable light on the pathogeny of the disease. Brigidi found changes in the celiac ganglia among which were proliferation of nuclei, strong pigmentation of the nerve substance, and the appearance of a sort of granular tissue of small lobar elements, in place of nerve cells. Fatty degeneration in the ganglia, and more so in the nerve fibres, was also observed. Sasaki (*Virchow's Archives*) reports the result of a case of progressive pernicious anemia, in which there were found changes in the nerve tissue of the intestinal walls. Like Brigidi, the changes he found were changes in the sympathetic system. The ganglion cells of the plexus mesentericus were very small, deformed and mostly without nuclei; many presenting a shining, homogeneous, sclerosed appearance; the nerve fibres were small and finely granular, between which were found small bodies like corpora amylacea, but which failed to give the reaction of the latter with iodine. The muscular layers of the intestine were atrophied and the villi of the mucous membrane were short and small. In another case was seen fatty degenera-

tion of the entire plexus of Auerbach, with fatty degeneration of muscular fibres; the villi were of opaque granular appearance, but no changes were found in the vessels in either case. Sasaki takes the ground that the changes found constituted another affection, and by creating digestive disturbance caused the profound anemia. This is possible, and if borne out by future investigation, affords a very plausible and substantial pathogeny for the disease. But it is probable that it will only include a part of the field now covered by the term pernicious anemia, and that part will then occupy a new place in the nosology. We have an example of this in what is now known as Egyptian chlorosis, which formerly was included under this same term, but which is now known to be due to an intestinal parasite, the anchylostomum duodenale. Flint, senior, prophesied years ago that the morbid anatomy of pernicious anemia would be found in the tubules of the gastro-intestinal tract; these later observations seem to confirm his views. One thing which, when discovered, will do much toward clearing up the character of this disease is still sought after, and that is the origin of the red blood corpuscles. Without this knowledge there will always be a break in the chain of evidence.

Clinical History.—There is nothing in the onset of pernicious anemia which will in any way distinguish it from any anemia or chlorosis. It is usually very insidious in its approach, and paleness and muscular debility become marked without corresponding emaciation. The patient early develops a hemorrhagic diathesis, the petechiæ, vibices, retinal hemorrhages, etc., have been mentioned. According to Immerman these are due to a weakening of the capillary walls, which he explains as follows: The integrity of the capillary walls depends on their supply of oxygenated blood; in this profound anemia they do not receive this, hence their weakened condition resulting in hemorrhage either by diapedesis or rhexis. Retinal hemorrhages are so frequent that an ophthalmoscopic examination should always be made where this disease is suspected. Partial blindness has been in some cases the first symptom for which the patient has applied for relief. This should be distinguished from the purulent retinitis sometimes found in leucocythemia, but never in perni-

cious anemia. As the petechiæ, vibices, etc. are not merely congestions nor stases, but true extravasations, they do not disappear after death; the contrary has been asserted in a case diagnosed pernicious anemia; to us, the anatomical condition of which these discolorations are the result forbids that they should disappear if present at the time of death. As the disease advances, the blood murmurs become more distinct, due to the progressive degeneration of the muscular substance of the heart. Also a loud venous hum appears in the cervical region. Towards the close appears almost always edema of the lower extremities and also fever, the pathogeny of which is much disputed. Immerman explains it in a very ingenious manner; he says, the slight waste going on leaves a large amount of tissue in the body which would otherwise be burned; this requires a constant supply of oxygen which it does not get and the large masses of cells break from a higher to a lower substance, liberate heat, and this being done we have an increase of heat or fever. This same symptom occurs in leucocythemia and pseudo-leucocythemia. The fever is of an irregular type and seldom runs very high. The mode of death is by slow asthenia unless some other disease intervenes or hemorrhage occurs into the brain.

Etiology.—The direct causes of pernicious anemia are, of course, unknown; but as it seems to have followed certain conditions in the majority of cases, the etiology deserves considerable notice. First, age has some effect, as it occurs usually between twenty and forty; this is one distinguishing feature from chlorosis, the disease which it most resembles. Sex has a great influence, though some of the later writers deny this in a measure; yet, all of the first cases described were women, and Gusserow describes the disease as extreme fatal anemia of pregnant women; and it is worthy of note that Immerman uses the pronoun "she" for the patient all through his description of the disease. There would seem to be also, some endemic influence, as nearly all the cases were from Switzerland and from one small canton. In some of the cases, the disease may be traced to a number of causes: poor living, bad hygiene, debilitating habits, repeated hemorrhages, all the causes which lead to

simple anemia may cause pernicious anemia. Some writers carry this view, and with good reasoning, to such an extent that they consider pernicious anemia only a complication of simple anemia. Again, we have the disease attacking those in robust health, and surrounded by the best of circumstances, and in whom none of the causes mentioned could operate. Repeated pregnancies following one another rapidly, or repeated and severe hemorrhages have preceded the disease in many cases; the former more frequently. In case of the disease occurring during pregnancy abortion always takes place and is a sure forerunner of speedy death.

Diagnosis.—Although pernicious anemia has no pathognomonic symptoms, indeed, presents nothing which may not be found in other profound anemias, yet there are some groups of symptoms sufficiently characteristic to enable us to arrive at a diagnosis in most cases. Those which prove most difficult are some malignant affections which pursue their course without giving the symptoms by which they are usually distinguished, and whose presence is often not revealed until the close, or perhaps not until the post-mortem examination. This has occurred with carcinoma of the viscera and myelogenic pseudo-lucocythemia. These must be excluded before the diagnosis can be made. Immerman details a case in which the clinical history and symptoms of pernicious anemia were complete, but from the fact of there being tenderness over the sternum, vertebræ and some of the long bones, he made the diagnosis of myelogenic pseudo-leucocythemia; post-mortem examination, so far as the changes in the marrow of the bones, according to his limitation of the term pernicious anemia, proved his diagnosis correct. The exclusion of leucocythemia would be made by an examination of the blood, the great increase of white corpuscles in the latter would be a pathognomonic distinction. The differentiation from pseudo-leucocythemia would be made by the anatomical changes in the spleen, lymphatic glands and marrow in the latter disease. From symptomatic anemia we would have, as pointing to the pernicious form, the extreme pallor and little emaciation; this is seen in leucocythemia and pseudo-leucocythemia, but not in anemia with a cachexia, and other severe

anemias; loudness and persistence of anemic murmurs are of considerable value after excluding the two above mentioned diseases, as is also the appearance of fever towards the close. The edema, especially of the lower extremities; and the hemorrhages, especially the retinal, are very constant. Added to these we have the general characters already given, and it must be by the association of these symptoms that we must determine the disease.

Prognosis.—This is very unfavorable without taking the extreme view of some that it must be fatal, in order to be pernicious anemia. The most favorable statistics give about six recoveries in fifty-four cases, but owing to the differences of opinion as to what constitutes the disease, statistics can at present be of comparatively little value; but little hope can be held out when once the diagnosis is established. The duration is usually given as from six weeks to twelve months or even longer. Six weeks is certainly the shortest time given by any authority, but from the character we do not think it can be even so short as this, unless it occurs in a case of pregnancy, and terminates in abortion and death.

Treatment.—The treatment thus far has, of course, been almost entirely unsuccessful and unsatisfactory. Nothing can be done but treat the indications as they arise, and that would be about the treatment demanded by a simple anemia; the transfusion of blood has been entirely unsuccessful; one writer has claimed to have used the intra-venous injection of milk successfully after transfusion had failed. Still every effort should be made on the part of the physician. If the intra-venous injection of milk holds out any encouragement, by all means try it.

THE MICHIGAN STATE BOARD OF HEALTH has decided to station inspectors at all border posts with authority to conduct rigid examinations of passengers and baggage from districts in which infectious diseases are prevailing. The general government will be requested to bear a part of the expense, as a great majority of those to be inspected are emigrants simply passing through Michigan to other states in the Northwest.

NEW YORK MATERNITY HOSPITAL, AND A CASE OF LABOR AS THERE CONDUCTED.

By Wm. Moore, M. D., New York Maternity Hospital, New York City.

[*Read before the St. Louis Obstetrical and Gynecological Society, by C. E. Briggs, M. D.*]

THE New York Maternity Hospital is a city institution for women unable to pay for medical attendance and the expenses incident to labor and convalescence. In it between four and five hundred women are annually delivered. It is located on Blackwell's Island, near the general City Hospital "Charity," in which it has four wards. There are three divisions: the "Waiting Wards," the "Pavilions," and the "Convalescent Ward." The waiting wards are in Charity Hospital, and usually average from sixty to eighty patients, who have entered from a few hours to four months before the expected time of confinement. The convalescent ward is also in the Charity Hospital building. The pavilions are two frame structures, each divided into four wards, one of which is used exclusively as a delivery, or "Pony Room," another is kept for cases in which a suspicion of septic trouble may have appeared, and is known as the "Sick Ward", to distinguish it from the remaining wards, occupied by normal cases only.

These are our accommodations—the waiting and convalescent divisions being in a building *with* wards containing every ill that flesh is heir to.

It is a well known fact, that, where puerperæ have to mingle with patients of a general hospital, the liability to septic troubles is greatly augmented; but the present success and recent improvement in appliances for carrying out thorough antisepsis proves conclusively its great value in reducing the number of septicemia cases, and in hastening normal convalescence.

Let us now follow a case from the time of admission, to the day of her discharge.

Upon admission to the *waiting* wards, the patient is examined

by the obstetric surgeon or an assistant, and notes are taken in regard to age, condition, nativity, age at first menstrual period, date of last menstruation, number of pregnancy, miscarriages, and all information as to previous labors. Next, an examination of heart and lungs, then of the abdomen is made.

Finally a vaginal examination is made, and the condition of os, pelvis, etc., noted—the fingers having been dipped in a solution of bichloride of mercury (1–2,000) before touching the patient. The finger is *never* introduced through the os. All these data are kept for reference at time of delivery, during the trials of which few women are amiable enough to give civil or correct replies, or allow of a physical examination being properly made. Only the surgeons connected with Maternity and the attending nurse are allowed to make a vaginal examination.

Laxatives are given only as required, purging never being permitted. The wards are well ventilated, and kept scrupulously clean. The beds are of straw, which is frequently renewed. Syphilitic cases are transferred to venereal wards and delivered by the physician having charge of those wards. It is hardly necessary to state that the obstetric surgeon and assistants keep away from the operating room, dead house and all wards from which infectious particles could possibly be carried. While in this ward the patient's urine is examined twice weekly, and a note made in the examining book of the slightest trace of albumen, or if casts be found.

The patients are kept as much as possible from commingling with those of Charity Hospital. The food and clothing are the same as that supplied the general hospital.

No preparation for lactation is made, although the poor class of patients might seem to indicate the necessity. The small number of cases having trouble in lactation renders any routine treatment unnecessary. Of over five hundred cases, delivered in the year ending to-day, October 1, 1885, only *five* have had any trouble with the breasts.

After the examination has been made, as detailed above, nothing now remains but to await the approach of labor. When the pains indicate that it progresses, the nurse makes a vaginal examination, and, if the os is dilating, takes the patient to the

"Pony Room," putting her in charge of the nurse who is to attend the confinement. She immediately washes the vulva, buttocks and inside of thighs, with the 1–2,000 solution of bichloride, named by Dr. Garrigues "*the* solution." Next, an enema of soap and water is given, a silver catheter, which is constantly kept in a five per cent. carbolic solution, is passed, and the proper changes in clothing are made. No flexible catheters are allowed to be used on Maternity service, the difficulty of getting them perfectly clean being sufficient ground for their rejection.

When the first stage is approaching completion, the Maternity Staff, consisting of a resident surgeon and two assistants, is summoned by an electric bell, their rooms being in Charity Hospital. Upon arriving an examination is again made and assistance, if required, given. If the first stage be complete, the vulva is covered with a piece of sheet lint, dipped in "the solution" From this time until the patient is able to leave her bed in the convalescent ward, this bichloride sheet-lint filter is kept over the vulva. No lubricants of any kind are used.

Now, the child being delivered, and the cord tied, the eyes are dropped with a ten-grain solution of silver nitrate, and immediately wiped off with a piece of clean, wet sheet lint. The results obtained by this simple precaution have been remarkable. In only one case of the last 240 infants delivered has there been anything more than a simple conjunctivitis. No discoloration from the silver has been observed.

Immediately after the delivery of the child, the woman is allowed to rest for twenty minutes, after which time the placenta is expressed by Credé's method, which the experience here shows to be of no harm whatsoever, when properly performed. In nearly every case is it used. Ten minutes after the expulsion of the placenta the external genitals are gently washed with "the solution," warm, no vaginal douche being given, unless it has been necessary to introduce the hand or forceps into the vagina. The "occlusion dressing" of Dr. Garrigues is now put on. It consists of (1) a piece of sheet-lint, six by nine inches, folded lengthwise, so as to be three inches wide; (2) outside of that a piece of oiled muslin, four by nine inches; (3) outside of

this a large pad of oakum, folded up in a piece of muslin eighteen inches square; (4) and the whole is fastened with four pins to the binder in front and behind.

The patient now being properly clothed, and having had her ergot, is ready for bed. She *rolls* from the "pony bed" (which is immediately furnished with fresh sheets, and a rubber cloth previously washed with "the solution") on to a stretcher is covered with blankets, and carried to a ward in one of the pavilions, rolled into bed, and her pulse taken. Here the same strict antisepsis is observed; the floor is sprinkled four times daily with a bichloride solution (1-1000), and the hands of doctor and nurse invariably dipped in "the solution" before touching the patient.

For eight days she remains on her back, the "occlusion dressing" being renewed every six hours, and for no reason is she allowed to raise the shoulders. At the end of this time, if convalescence progress favorably, she is again put on the stretcher and carried to the convalescent hospital ward in Charity Hospital, from which she is discharged on the fourteenth to the twentieth day from the date of confinement.

If while in the pavilion the breasts become over-full, a breast binder is put on and so applied as to get uniform compression, the kneading process being looked upon with disfavor. Where it is desired that the secretion of milk be stopped, a solution of atropine sulph. in glycerine (gr. $\frac{1}{4}$ to i.) is used, a saline cathartic being given at the same time. Fissured nipples are treated with dry tannic acid.

The wards of these pavilions are used in rotation: one ward being full another is opened, and after the last patient from the first has been transferred to the convalescent ward, it (the first one occupied) is fumigated with sulphur. Every piece of furniture, bedsteads, chairs, tables, closets, and contents, all are exposed to the fumes. After from six to ten hours the windows are thrown open and the ward thoroughly aired, then floor, furniture, bedsteads, etc., are washed with soap and water, and later with the 1-1000 bichloride. The ward is now ready for occupancy again. For fumigation, twenty pounds of sulphur has been found sufficient for a ward accommodating nine patients. This system of rotating wards allows of rapid filling, emptying, and frequent fumigation and changing of beds.

We have supposed a case to have had a normal labor and sequelæ, but if the course be *not* normal, if about the third day the temperature goes up to 102° or higher, then an examination with bivalve speculum is made, to ascertain, if possible, the cause. If there be retained membranes, they are removed and an intra-uterine douche, of 1-4000 bichloride solution given. If the temperature remains up, then the patient is transferred to a tent, or to the "sick ward," if weather does not permit the use of tent. For the "sick ward" there is a special doctor, nurse and helper, who are not allowed to associate with those having anything to do with the normal cases. All clothing, bedding, etc., of these septic cases is sent separately to the wash and washed separately. The exclusion of strangers and clergymen from the pavilions has been deemed absolutely necessary, the latter going from surgical and venereal wards, rendering them specially liable to carry the infectious particles.

To many this precautionary routine, as here detailed, will appear unnecessarily stringent, but whether it be so or not, the results obtained by its adoption in this institution, as well as in others of Boston, Baltimore, and elsewhere, can not fail to persuade even the most incredulous that it has a value.

The following are a few statistics of this hospital for eight years before the adoption of this system; the mortality percentage was never below 2.36. For the year ending Oct. 1, 1883, the percentage was 8.6. Now begins the antiseptic system. The year ending Oct., 1, 1884, gave us 1.39 per cent.; ending Oct. 1, 1885, gives 0.76 per cent. Inflammatory puerperal diseases are now a rarity, while before almost *one* in *five* cases had more or less trouble.

How can this be explained—the buildings are the same, the doctors and nurses are no better,—if it be not through the agency of a thorough system of antisepsis, with bichloride of mercury as the chief factor.

We have tried antipyrine extensively. I think the general opinion in regard to its use in puerperal cases is that it only masks the real trouble and prevents measures being taken for permanent reduction of temperature.

It is the routine to put on a breast binder after delivery of pa

tients as soon as lactation is established. This is kept on till the tenth day; and to it is credited the smallness of our number of cases of mammary abscess.

PSYCHOLOGICAL ASPECTS OF SUICIDE.—DR. J. S. CONRAD thus concludes a paper read by invitation before the Medical Society of Virginia, September, 1885:

1. Suicide increases with the advance of civilization, and is but little known in the savage state of men.

2. The act is an intelligent one (?), done with a full consciousness of the act, as shown by the method of execution, whether by the sane or insane.

3. That suicide is done always for the purpose of escaping an evil, and for the benefit of the felo-de-se, whether by sane or insane.

4. That it is a voluntary act (?), whether by sane or insane.

5. That it is an emotional act, whether by sane or insane, however deliberately planned and executed, since deliberation enters into the mind of both mental states.

6. That delusions are not essential to the distinction as to the sanity or insanity of the suicide, since authorities affirm that delusions are not essential to the proof of insanity.

7. That suicide is rare in the first class (Insanity by Maudsley), viz., intellectual or ideational insanity; but does occur in the vast majority of the second class, as affective or emotional forms of insanity.

8th. Query. Is suicide an intellectual act, notwithstanding the intelligence exercised in its execution? Or is it an emotional act per se, since we have seen that the emotional part of mind dominates the ideational centres, and perverts the intellect into becoming its humble servant?

9. Does moral depravity satisfactorily account for it, when we have seen that moral depravity is a factor of both sane and insane?

10. That in doubtful cases of the sanity or insanity of the felo-de-se, very great caution is necessary in making up a just judgement as to the one or the other.—*Med. News*, Oct. 10, 1885.

CASES FROM PRACTICE.

EXCISION OF THE HIP-JOINT.

By H. H. Vinke, M. D., St. Charles, Mo.

Ever since 1854, when Lewis A. Sayre operated for the first time successfully in this country, resection of the hip-joint has been done with variable result. The operation came so much into vogue that the joint no doubt was frequently excised in cases which, by proper mechanical treatment, might have recovered. It was, however, soon learned that excision of the head of the femur was not a very promising operation, that about 50 per cent. of the patients operated upon died, and that only a part of those recovering had useful limbs. The result of this was that the operation fell somewhat into disrepute; and there can be but little doubt that to-day many cases which should be operated upon are neglected till recovery is impossible and an operation impracticable. In looking for the cause of this high mortality, it must be remembered that patients afflicted with hip-joint disease are generally suffering from some constitutional vice, as amyloid disease, and have a hereditary tendency to tuberculosis, and these patients not infrequently succumb, even after an operation, to the constitutional trouble, and die, not as a result but in spite of the operation.

This suggests the question: Is excision of the hip-joint a rational and justifiable operation; and, if so, what are the indications for the same? Both of these questions may be answered together. Resection of the hip-joint must not be entertained as long as there is present any reasonable hope for spontaneous cure, with fair functional recovery (Koenig). When, however, the proper local and constitutional treatment has been employed without success; when, in spite of mechanical appliances intelligently used, rest, good hygienic surroundings, etc., the patient begins to fail; when sinuses leading to dead bone and discharging pus make

their appearance; when fever exists, which may perhaps be explained by the presence of fetid pus; when any or all of these latter symptoms are present, there can be no longer any doubt about the propriety of operative interference. Without an operation the patient is almost certain to die from septicemia or exhaustion, or both together; whereas an operation offers the possibility of recovery with a useful limb. There is nothing to lose by an operation, but much mischief especially to the acetabulum is certain to occur by postponing. The sooner the operation under these circumstances is undertaken, the better will be the result. The operation of itself is not of a very serious nature, and is seldom the immediate cause of death. The joint, as a joint, has disappeared, and there seems to be no more danger in an operation undertaken upon the hip-joint than in any severe operation for necrosed bone (Bryant). It would seem, therefore, rational and expedient to give the patient the benefit of an early operation, even if he be doomed to die and perish in spite of the same; the relief of pain and palliation secured, is sufficient to justify the operation.

In the following I desire to report a resection of the hip-joint for non-tubercular coxitis, that form of coxitis in which an operation promises the very best results.

May 24, '85, I saw for the first time W. F., a boy of 16 years, with my friend, Dr. C. M. Johnson. We obtained the following history: Nine years ago, while going to school, and then only seven years old, he was violently thrown upon a curb-stone by one of his playmates, falling upon the left hip-joint. At first but very little pain and inconvenience was experienced, but several months afterwards the hip-joint became painful, and he would have "lame spells," as he called them. He would completely recover from these attacks to be again seized and forced to keep his bed for a week or two at a time. This condition of affairs continued till about four years ago, when the joint began to swell and became very painful; abscesses now formed and opened, leaving permanent fistulæ. During this time, with the exception of short intervals of relief, he suffered excruciating pains, and was totally unable to walk about. To allay the pain and secure rest at night, he was compelled to resort to morphine.

The condition present was as follows: The diseased limb was considerably atrophied, and perhaps one and a half inch shorter than the healthy one. Five sinuses, one on the back, two in the

groin, one upon the thigh, and one upon the lower surface of the thigh were all discharging considerable pus, and with a probe introduced into them, the presence of dead bone could be readily determined. The general condition was bad; he was much emaciated and exhausted from constant discharge and pain. His pulse was 120. The rest and expectant treatment having failed, we determined to operate the next day.

The next day, therefore, being kindly and ably assisted by Drs. C. M. Johnson, John E. Bruere and Grear Morgner, the operation was commenced by making a slightly curved incision, five inches in length and down to the bone, commencing at a point midway between the anterior superior spinous process of the ilium and the trochanter major, over the center of the latter. This incision, as recommended by Dr. Sayre, is probably the best, as it has the advantage that the joint can be readily reached, that by enlarging it any amount of dead bone may be removed, with the least injury to the soft parts, and that a ready exit for the pus is secured. The bone was found much involved and much enlarged. The central cavity was filled with pus, and the external compact tissue was rendered so thin that a finger could readily be pushed through it into the medullary cavity. This rendered the division of the bone by a strong and sharp knife possible. The head was firmly attached to the acetabulum, and was detached with some difficulty. Now the bone was sawed through below the trochanter minor, but as the femur was still much diseased, the external wound had to be enlarged a few inches and another inch of the shaft was removed. Even now the bone, especially at its inner margin, did not look very healthy; but trusting that nature might eliminate the rest, if any necrosed bone remained, it was decided not to shorten the femur any more.

The acetabulum was now carefully examined, and finding some necrosis on several places, the necrosed bone was removed by the aid of a sharp spoon.

The greatest care was observed to leave as much as possible of the periosteum; and it was found that the same could be readily peeled off from the necrosed shaft. It was found that over five inches of dead bone in all had been removed. The wound was now thoroughly washed with carbolized water, and a drainage tube introduced. Two sutures were employed, one at the upper and one at the lower angle of the cut, and iodoform dressing applied.

After this the leg was placed in a Smith-Hodgen wire suspension splint. Its extension by weights causing too much pain and discomfort, these were omitted, and the patient had only the benefit of the extension and counter extension which the above named splint affords. On account of the copious discharge of pus, the dressing had to be changed daily, after the third day.

There was only little fever observed, the highest temperature being reached on the third day after the operation, when the thermometer in the axilla registered 102°, the pulse at the time being 120. Patient required a dose of morphine nightly, for about a month after the operation, in order to be enabled to sleep; whether he took this to allay pain, as he claimed or by force of habit, I am unable to say. Immediately after the operation, the general health of the patient began to improve, and the sinuses commenced to close. Within the next two months three small spiculæ of bone came away through the lower end of the incision, and at this writing, this is the only place which is discharging any pus yet, a few drops daily, all the sinuses having healed completely.

September 8, a little over three months after the operation, patient was up and able to be about on crutches. To-day he is able to walk about with the aid of a high shoe and a cane. Had it been possible to effect extension by weights, or had the patient been in better circumstances, and able to obtain a Sayre's cuirass or Bryant's double splint, the shortening, perhaps, would have been less. For several reasons, however, it would seem that the wire suspension splint recommends itself in these cases. The wound can be so easily dressed when the limb is suspended; and then, again, for the purpose of rendering defecation possible and comfortable to the patient, it is of value.

Considering the many disadvantages under which the operation had to be undertaken, the bad condition of the patient, the aggravated form of his disease, the amount of dead bone removed, his inability to avail himself of the benefits which those nice splints and appliances, invented by ingenious surgeons, will afford—considering all these adverse circumstances, the result in this case, I think, must be considered fair.

SPASMODIC CROUP COMPLICATING MEASLES.

By A. B. Holder, Paris, Miss.

Louisa M., 19 years old, nervous temperament, had measles, progressing normally till second day of eruption, Oct. 15th, at night. At 7 or 8 P. M. she was observed to be voiceless and breathing with difficulty. The breathing grew more difficult, and presently she failed in an inspiration. There was evidently a spasmodic closure of the air-passage. The spasm yielding gradually, there was noisy and then easy breathing, and presently other spasms, returning every few minutes for half an hour, and similar attacks of shorter, duration succeeding this till 3 A. M., and recurring for two nights thereafter, never occurring in day time.

The individual paroxysms lasted from a moment to twenty or twenty-five seconds. The trouble was solely in inspiration. In the interval breathing would be normal. She was conscious throughout the attacks. She had slight pain and dryness in the throat partial aphonia for several days, the usual slight bronchitis and cough. Patient never, even as a child, had "croup" before. Temp. 100° to 101°, pulse 80 to 90 and unaffected by paroxysm. Patient now convalescent (Oct. 22).

Meigs and Pepper, Tanner, Wood, etc., mention pseudo-membranous croup as a rare and fatal complication. Bristowe states that "very often croupy symptoms manifest themselves" but leaves us ignorant whether of membranous or spasmodic form.

Dr. Hardaway alone, of writers consulted, clearly mentions the complication. See *Am. Sys. of Prac. of Med.*, Vol. I., p. 564, et seq.

The Ogle County Medical Quarterly.—The Ogle County Medical Association has established a quarterly medical journal in which will be published the proceedings of their regular meetings and other matter of interest to its members. The first number which has just come to hand is neat, well printed and a credit to the Association.

EDITORIAL.

ST. LOUIS WATER SUPPLY.

Last winter, in view of the fact that Asiatic cholera had been prevalent in the south of Europe and might reasonably be expected to make its appearance upon this side of the Atlantic during the current year, efforts were made in different directions to secure better hygienic conditions, if possible, for our city.

Among other things, as the result of considerable pressure brought to bear upon the Municipal Assembly, an ordinance was enacted abolishing wells which should be found to contain six or more grains of chlorine per gallon, provision being made for the filling by the city through the street-cleaning department of such wells situated on public streets or sidewalks; while wells on private property, after being duly condemned as nuisances, were to be ordered filled by the owners of the property.

In order to carry into effect this measure, as well as to accomplish other needed sanitary work,a considerable sum of money was voluntarily contributed by public spirited citizens and expended under the direction of the Citizens Sanitary Aid Association. A force of well inspectors was organized under the direction of Prof. Potter. Examination were made of 4511 wells out of a total of 6666 in the city and reports were made with reference to the amount of chlorine present. In accordance with the section of the ordinance relating to wells on streets and sidewalks, the Street Commissioner was notified of the fact when such wells were found to contain six or more grains of chlorine; and that officer sent his men out, removed the pumps from them and filled up 152 wells which had been so certified to him by the Board of Health.

Just at the time when the public interest in well-closing was at its height a municipal election took place, and the position of candidates upon the question of well-closing was made an issue in many parts of the city which determined their success or defeat at the polls.

After having taken action first upon the character of the public wells, the attention of the Board of Health was given to the reports concerning wells on private property. A number of these were condemnned for drinking purposes and the property owners were ordered to supply their premises with river water; but before any test could be made with reference to the filling of such wells, the newly-elected Municipal Assembly repealed the ordinance condemning wells under the chlorine test and restored the old ordinance which authorized the Board of Health to condemn as a nuisance wells which chemical analysis proved to be non-potable.

Chemical analysis involved an expenditure of not less than five dollars for each well examined; and the fund at the disposal of the Board of Health for such purposes was exhausted. Some delay was caused by this fact. The matter of expense having been provided for, the question arose as to the standard which should be adopted. It was determined to have analysis made of three wells so situated (one in the northern, one in the southern and one in the western part of the city) as to afford reasonably satisfactory assurance that the water was free from pollution, and also an analysis of the river water as drawn from a hydrant, and to base the standard upon the results so obtained. These analyses were made by three chemists, viz., Thos. J. Caldwell, Jno. A. Heckelmann and Louis Weinerth. Their results varied very slightly and accordingly only that of Mr. Caldwell is here given:

Well No. 1 was situated at 4559 N. Broadway—an open,dug well with pump in constant use, 19 feet deep, surroundings good.

Well No. 2, west line of east boulevard in Forest Park, opposite Forest Park boulevard—open, dug well with pump in constant use, 11 feet deep, surroundings good.

Well No. 3. 7416 S. 6th Street—open, dug well with pump in constant use, 50 feet deep, surroundings good.

Well No. 4. (Taken as a sample of bad well water) 1416 Salisbury Street—open, dug well with bucket and windlass, in constant use, 36 feet deep; sewered water-closet about 20 feet distant; also small underground yard and house drain passed in front of well about 8 feet distant to water closet.

Hydrant water was taken at 622 Locust Street, on 3d floor; same being in constant use—designated in table as No. 5.

Analysis of Water from Four Wells and from a Hydrant.

No.	Chlorine.	Total Solids.	Organic Matter.	Free Ammonia.	Albuminoid Ammonia.	Nitrates.	Nitrites.
	Grains per U. S. Gallon.			Parts per Million.			
1	1.15	45.61	0.98	Trace	.05	1.2	None
2	1.26	25.87	1.05	Trace	.06	3.0	None
3	0.55	20.73	0.70	Trace	.04	None	None
4	21.48	172.28	4.74	.26	.22	12.6	None
5	0.38	14.07*	1.73	Trace	.14	1.2	None

*Water taken after settling 2½ days.

With regard to chlorine, it had been demonstrated during the course of investigation, prior to the repeal of the ordinance closing the wells on the chlorine test, that large numbers of our German fellow citizens are in the habit of "salting" their wells, some "to kill or drive away bugs," others because in their opinion "it makes the water better." In almost every case where chlorine was found to be present in very large quantity the statement was made on behalf of the owner that he had salted his well.

In Parkes' Manual of Practical Hygiene, p. 79, occurs the following: "If chlorine be present in considerable quantity, it either

comes from strata containing chloride of sodium or calcium, from impregnation of sea-water, or from admixture of liquid excreta of men and animals. [We should add "or has been purposely added."] In the first case the water is often also alkaline from sodium carbonate; there is an absence, or nearly so, of oxidized organic matters, as indicated by nitric and nitrous acids and ammonia, and of organic matter; there is often much sulphuric acid. * * * * If from sewage, the chlorine is marked, and there is coincident evidence of nitric and nitrous acids and ammonia, and sometimes phosphoric acid."

Farther on the same author says: "Ammonia is almost always present in very small quantity; but if it be in large enough amount to be detected without distillation it is suspicious. If nitrates, etc., be also present it is likely to be from animal substances, excreta, etc. Nitrates and nitrites indicate previously existing organic matters, probably animal, such as excreta, remains of animals, etc.; but nitrates may also arise from vegetable matter, although this is probably less usual. If nitrites largely exist, it is generally supposed that the contamination is recent. * * * Large evidence of nitric acid, with little evidence of organic matter, indicates old contamination; if the organic matter be large and especially if there be nitrous acid as well as nitric present, the impregnation is recent."

With reference to the free and albuminoid ammonias, Mr. Wanklyn says: "If a water yield .00 parts of albuminoid ammonia per million, it may be passed as organically good and pure, despite of much free ammonia and chlorides; and if, indeed, the albuminoid ammonia amounts to .02, or to less than .05 parts per million, the water belongs to the class of very pure water. When the albuminoid ammonia amounts to .05, then the proportion of free ammonia becomes an element in the calculation; and I should be inclined to regard with some suspicion a water yielding a considerable quantity of free ammonia, along with more than .05 parts of albuminoid ammonia per million. Albuminoid ammonia above

.10 per million begins to be a very suspicious sign, and over .15 ought to condemn a water absolutely."

The Board of Health believed that they had reason for the opinion that aside from the purposeful addition of salt in many cases, as already referred to, a notable amount of chlorides was present in wells in this region which were free from any form of sewage pollution, and that in order to condemn a well they should have other evidence of its contamination than that furnished by the presence of chlorine.

This opinion has since been modified by the discovery of unquestionable sources of pollution to one of the wells which had been regarded as a strong evidence against the validity of the chlorine test; and the result of the examinations by the Board of Health would establish the value of chlorine as evidence of contamination wherever a well has not been intentionally "salted."

Having always regarded the water of the Missouri river, as furnished to the people of St. Louis by the city water-works, as a *ne plus ultra* of sanitary excellence, it was somewhat startling to find it furnishing on analysis a proportion of albuminoid ammonia which, according to the highest English authority, would render it exceedingly suspicious, within one one-hundreth of a part per million of the quantity which according to that authority should positively condemn it as a potable water.

It was finally determined to base the condemnations largely upon the presence or absence of nitrites together with the ammonias. Accordingly analyses were made of forty three wells and of this number twenty-six were condemned.

It is possible that the Board would have been justified in condemning some others of these wells, that some of those which were dismissed are really as dangerous as some of those which were condemed, but the Board of Health acting on its best judgment at the time when action had to be taken did not consider that the analysis made warranted such condemnation.

CLIMATIC TREATMENT.

The season is approaching when those suffering with pulmonary disease will be seeking advice and guidance and the physician will be called upon to decide the home, either temporary or permanent, of his patient. He is expected to have positive and definite information on which to form a judgment, and his confiding patient will follow his advice with implicit confidence.

On what slender grounds does he often lay down the law, only to find when too late that he has advised badly, that his patient instead of being improved has been made decidedly worse by the change; and perhaps precious time has been lost which cannot be regained.

The error in these cases is due often to a defective knowledge of the climatology of the country as well as to a faulty appreciation of the actual condition of the patient. Our knowledge of the different climates of the United States is still sadly defective. It is too often derived from simple hearsay evidence. Often it is obtained from the letters of interested newspaper correspondents whose visit has been made under exceptionally favorable circumtances or from the published statements of a local observer, so prejudiced in favor of his own locality, that he forgets or overlooks the disadvantages and enthusiastically gives us a rose-colored picture.

Such observations are of little value in estimating the worth of a climate in a medical point of view. Too often fashion or the dictum of some great medical light decides the question, and the tide flows on until it is turned by accidental circumstances or the published statements of some rival medical authority. We have all seen the diversity of views held by eminent medical men in regard to the proper climate for the consumptive. A few years ago the southern gulf coast and Florida were crowded with sufferers in all stages of the disease. Bitter experience has taught us that the soft, humid climates only accelerate the processes for whose cure

the pilgrimage has been made. The tide then turned to the dry stimulating air of the Rocky Mountain plateau and the discomforts and loneliness of a ranch life.

We are beginning to learn that the Colorado air does not give the ideal climate, and that many cases are positively injured by a residence in the high altitudes. The expense, the lack of proper food and the climate itself often intensify the sufferings and take the last chance from the consumptive. The soft balmy air of the Pacific slope has allured many who take the long weary journey, only to die among strangers, to be brought back in their coffins.

The aphorism, "each individual consumptive must seek and find the especial climate suitable for him by trial," is simply a confession of ignorance on the part of the adviser. Either he does not appreciate the pathological changes taking place in his patient or he is ignorant of the general laws and effect of different climates upon the human economy.

That each individual case needs a special climate is undoubtedly true, but the selection should be made not from the experience of the patient, for this is often deceptive, but from the actual pathological changes and the general constitutional condition. These give imperative data which, if we have the good of our patient at heart, must be strictly followed, and a climate suitable for such conditions should be selected.

In Europe the real value of the different health resorts has been determined by accurate and long extended scientific observations, combined with the test of actual experience. The records of each place can be obtained, and we can know approximately in advance the conditions to which our patient will be subjected during his sojourn.

In the United States the study of climatology is still too much in its infancy to give us such accurate positive data. Much is being done at the present time by the U. S. Signal Service and by a few scattered observers, but the country is so vast that we have only at

present some of the elementary tables from which the climatic value of a health station can be conjectured.

The Signal Service reports give us information of the altitude, the thermometric, barometric and hygrometric variations; we cannot estimate the dryness and humidity of the air of a given station, but we lack many facts which would determine the station to be a suitable health resort.

The individual peculiarities of each place, the character and prevalence of the winds, its location in respect to protecting mountains, the character of the soil, the absence or prevalence of fogs or dust, and the purity and wholesomeness of the water supply must all be taken in full consideration.

Time will remedy this defective knowledge, and then we can justly appreciate the true value of our different health resorts.

In seeking a home for our invalids there is still another consideration that is too often overlooked or ignored by the physician.

The place selected may have an ideal climate for the special case, but are the accommodations and resources (including, under this, the possibility of having good proper food, amusement, occupation or society), such as to render life tolerable or possible? To send a patient with an irritable dyspeptic stomach to a place where the only food obtainable can only be assimilated by one in full bodily vigor, can only entail disorder; or to consign one fond of society and the fellowship and sympathy of others to the ennui and loneliness of a western or Texan ranch is certainly not the part of wisdom. In our selection of a health station, these considerations are of equal value with that of climate, and without them the searcher after health, will find climatic treatment a delusion and a snare—without comfort, without intelligent medical attendance, without proper food, without occupation or amusement, without friends—no wonder the unfortunate consumptive returns home in desperation, preferring shorter life amidst the comforts of his home to a prolonged existence under the sunny skies and bracing air of a chosen climate.

VACCINATION AND REVACCINATION.

At the present time when the thought of the public as well as of physicians is attracted to the subject of vaccination by the reports of the terrible scourge of small-pox in Quebec and of its prevalence in epidemic form in several places in our own country, it will be a matter of interest to summarize the report of the German Vaccination Commission which held its sessions a year ago in Berlin.

This Commission was appointed for the purpose of determining the present physiological and pathological position of the vaccination question as a whole, to ascertain the precautions necessary to secure the safety of the person vaccinated, and to take measures for the introduction of the use of calf-lymph instead of humanized lymph. Some very valuable statistics and charts were prepared for the Commission in the office of the Imperial Board of Health, many of which were reproduced in the *British Medical Journal*, Aug. 29, 1885.

In 1874 a new vaccination law went into effect in Germany, whereby revaccination was made compulsory, the age of twelve, before the children left school, having been that selected. Germany is the only country requiring revaccination, although primary vaccination is compulsory in several European countries. The results of this new law are very striking and furnish matter for profitable consideration.

Comparing the mortality from small-pox in Germany before and after the enforcement of that law we find that prior to 1870 the mortality from this disease was tolerably uniform, but was temporarily increased by the occurrence of epidemics every ten or twelve years. In the interval between the epidemics the average annual mortality was 15 to 20 per 100,000 of the population. During the epidemic period it would reach two to three times that proportion for about two years.

In 1871–2 the great small-pox epidemic broke out in connection

with the Franco-Prussian war, and the mortality reached 243 and 262 per 100,000 in those two years. In the two following years, as is usual after severe epidemics, the mortality fell to 35.6 and 9.5 respectively.

In 1874 the new law went into operation and its influence is apparent. Without this law the mortality would soon have reached its usual average of 15 to 20 per 100,000; it sank the following year to 3.6.

In 1876 it was	- - - - - -	3.1	per 100,000.
" 1877 "	- - - - - -	0.3	" "
" 1878 "	- - - - - -	0.7	" "
" 1879 "	- - - - - -	1.2	" "
" 1880 "	- - - - - -	2.6	" "
" 1881 "	- - - - - -	3.6	" "
" 1882 "	- - - - - -	3.6	" "

Comparison with the mortality in other countries will evidence that this was really the result of the enforcement of this law.

In Austria, prior to 1871, the mortality from small-pox had been a little higher than that of Prussia, but in other respects had closely followed the same course.

The great epidemic lasted longer and was more fatal here than in Prussia, giving for the years 1872–3–4 mortalities of 190,323.3, and 178 respectively, per 100,000 of the population. Afterwards there was a notable falling off for two years, giving for 1875–6 death rates of 57.7 and 39.2.

In 1877 it was	- - - - - -	53.7	per 100,000
" 1878 "	- - - - - -	60.6	" "
" 1879 "	- - - - - -	50.8	" "
" 1880 "	- - - - - -	64.3	" "
" 1881 "	- - - - - -	82.6	" "

Comparison of these figures with those just given for the same years in Prussia demonstrates that the notable decline in the mortality from small-pox in that country is due to the law making revaccination compulsory.

Further confirmatory proof is obtained by the comparison of statistics of a number of large towns or cities in Prussia and other European countries, and of the Prussian and other armies.

Medical Work in Persia.—In Persia every person is a physician in his own way, following, for the most part, mere family tradition; but many of those who prefer some special learning have read the old medical works of the Arabs, which contain here and there very intelligent observations, mixed, however, with a great amount of dangerous error. These native practitioners believe that the older the medical book the more valuable is its instruction. Their modes of treatment and their medicines accordingly are often utterly absurd, and sometimes horrible. The Persian physicians are, with few exceptions, mercenary charlatans. They are very jealous of foreigners; but they are being stimulated to master Western medicine in order that they may compete with the new-comers. There is no more encouraging field open to the medical missionary than this of training the native physicians. They are always anxious to hear and see, and they are most skilful imitators. In another quarter of a century Persia will be pretty well supplied with competent native physicians.

It is difficult to practise medicine among the poor in Persia unless they can be removed from their wretched homes to comfortable hospitals. What are called the poor in America live as well as the more prosperous of the middle classes in Persia. The condition of the ordinary Persian laborers is certainly pitiable. Half a dozen or more huddle together in a little, dark, damp and dirty mud hovel, not fit for the lower animals. I have often entered these wretched abodes and found them crowded with human beings, who probably came to see a child down with diphtheria or some kindred disease. I have to make my way to the darkest and most crowded part of the room, where the little sufferer will be found lying on a hard and very dirty mat, struggling to get a breath of air. The first thing to be done is to send the visitors home; but too many will remain. The necessary medicines are prepared and given, the little patient made more comfortable; but still two things are wanting—good food and a competent nurse. The poor of Persia live on the coarsest kind of fare. For example, cucumbers sliced, skins and all, swimming in sour milk, are a luxury. The nursing is wretched. The friends of the sick person soon become discouraged, think fate is against them, and stand stupidly around the sufferer without thinking of giving any help.—*Foreign Missionary*, Oct., 1885.

BOOK REVIEWS AND NOTICES.

A Text-Book of Pharmacology, Therapeutics and Materia Medica. By T. Lauder Brunton, M. D., D. Sc., F. R. S., etc. Adapted to the United States Pharmacopeia by Francis H. Williams, M. D., Boston, Mass. *Philadelphia: Lea Brothers & Co.*, 1885. 8vo.; pp. 1035; sheep.

Those who have been at all familiar with the medical periodical literature of Great Britain are aware that the author of the volume now under consideration has been the contributor of a number of most valuable papers upon the physiological and therapeutical action of various drugs. And they will be prepared to give a favorable reception to this more complete work.

With reference to the first section embracing 426 pages of the volume they will not be disappointed, for the statements of the action of different drugs are clear and satisfactory.

With reference to the rest of the volume so favorable an opinion cannot be expressed. The section on General Pharmacy is scarcely more than an enumeration of various pharmaceutical preparations. The classification of medicinal agents in the following sections is by no means satisfactory. What advantage is to accrue to the physician from a grouping of the inorganic substances according to their chemical nomenclature as monad elements, dyads, triads, etc., we fail to appreciate. Nor does it appear why artificially prepared organic compounds are set in one section as constituting the whole of the "Organic Materia Medica," as if the "Vegetable Materia Medica," and remedial agents derived from the "Animal Kingdom" which are placed in subsequent sections were not just as truly a part of the organic materia medica.

Over one hundred pages at the close of the volume are occupied with indexes which are of special importance here inasmuch as the classification adopted would make it a very difficult and tiresome matter to find any particular article which it might be desirable to consult unless one were so assisted. One valuable feature is the

biographical index, probably the most complete one in this department to be found anywhere.

We incline to agree with the opinion expressed by our associate, Dr. O. A. Wall, in the *National Druggist*, that "the matter contained in the last half of the work is to be found in much better shape in a number of other works."

Epitome of Diseases of the Skin. By Louis A. Duhring, M. D. *Philadelphia: J. B. Lippincott Company.* 1886. 32 mo.; pp. 130; cloth, 60 cents.

This little volume is simply an abstract of a course of sixteen lectures delivered by Prof. Duhring before the graduating class of the University of Pennsylvania, and reprinted and revised from the *Medical News* where they were first published.

A Text-Book of Physiology. By M. Foster, M. A., M. D., F. R.S., etc. Third American from the fourth English edition, with extensive notes and additions, by Edward Reichert, M. D., etc. With two hundred and seventy-one illustrations. *Philadelphia: Lea Brothers & Co.* 1885. 12 mo.; pp. 911; cloth, $3.25, sheep, $3.75. (St. Louis Stationery and Book Co.: J. H. Chambers & Co.)

As the author states in the preface this edition remains very much like the former one except that he has abandoned the plan of distinguishing by large and small type the more important and well established portions of physiology from those which are still the subject of controversy between different observers. Some parts of that which in the former edition were set in small type are in this incorporated with the rest of the text while other parts are omitted.

Thus although very little change as to the statement of facts or principles has been made, the appearance of the volume has been improved and it is much pleasanter to read or study the present than the former edition.

A Treatise on the Science and Practice of Midwifery. By W. S. Playfair, M. D., F. R. C. P., etc. Fourth American from the fifth English edition. With notes and additions, by Robert P. Harris, M. D. With three plates and two hundred and one illustrations. *Philadelphia: Lea Brothers & Co.* 8vo.; pp. 663; cloth, $4.00; sheep, $5.00. (St. Louis: J. L. Boland: J. H. Chambers & Co.)

Dr. Playfair's treatise on obstetrics is too well known to require from us anything further than a notice that he has carefully revised this new edition. He has shown his appreciation of Dr. Harris' work in editing the third American edition by incorporating a con-

siderable part of his notes into the text; and Dr. Harris has made additional notes to this new edition. We observe a number of such additions in the chapters on pelvic deformities and the major obstetrical operations.

For the use of the medical student "Playfair's Obstetrics" is most excellent, while at the same time it is a thoroughly reliable guide for the practitioner.

The printing and binding of the volume are in keeping with the excellence of the work.

Post-Mortem Examinations, with Especial Reference to Medico-Legal Practice. By Prof. Rudolph Virchow. Translated by T. P. Smith, M. D., M. R. C. S., etc. With additional notes and new plates. From the fourth German edition. *Philadelphia: P. Blakiston, Son & Co.* 1882. 12 mo.; pp. 138; cloth; $1.00.

No one is better qualified than the Berlin Professor to teach the best method of making a post-mortem examination. Especially when made for the purpose of solving medico-legal problems is it essential that such examination should be systematic, complete, thorough. No one who has such examinations to make should fail to be familiar with Prof. Virchow's method which is clearly set forth in all details in this little volume.

Poisons: Their Effects and Detection. A Manual for the Use of Analytical Chemists and Experts with an Introductory Essay on the Growth of Modern Toxicology. By Alexander W. Blyth, M. R. C. S., etc. With tables and Illustrations. *New York: Wm. Wood & Co.* 1885. Vol. I, pp. 333.; Vol. II, pp. 335; cloth. (Wood's Library).

While these volumes are intended particularly for the use of analytical chemists and experts in toxicology, there is a good deal of interest for the physician intermingled with the more technical portions. The chapter on "The Old Poison-Lore" contains a good many interesting facts.

While the paragraphs on diagnosis and treatment of poisoning by the various agents are clear and satisfactory we do not think these volumes will be of as much practical value to the practitioner as some of the others of Wood's Library.

The Ten Laws of Health; or How Diseases are Produced and Prevented; and Family Guide to Protection Against Epidemic Diseases and Other Dangerous Infections. By J. R. Black, M. D. *Philadelphia: J. B. Lippincott Company.* 1885. 12mo.; pp. 413; cloth; $2.00.

The author discusses in this volume the various elements of hygienic living; first, breathing pure air; second, adequate and whole-

some food and drink; third, adequate out-door exercise; fourth, adequate and unconstraining clothing; fifth, proper exercise of the sexual function; sixth, adaptation of climate; seventh, wholesome occupation; eighth, personal cleanliness; ninth, tranquillity of mind, adequate rest and sleep; tenth, avoidance of intermarriage with near kindred.

Part second contains a consideration of the germ theory of disease and then of each of the ordinary infectious diseases, methods of disinfection, personal and domiciliary.

Many of the points are well taken and on the whole the book is calculated to be of service in teaching the people how to live, although some features seem to be exaggerated and overdrawn. The second part contains many very valuable suggestions.

FOWNES' MANUAL OF CHEMISTRY. Theoretical and Practical. new American from the twelfth English edition, embodying WATT's Physical and Inorganic Chemistry. *Philadelphia: Lea Brothers & Co.* 1885. 12 mo.: pp. 1056; cloth or sheep. (St. Louis Stationery & Book Co.: J. H. Chambers & Co.)

The demand for new editions at short intervals shows that our old friend is not losing its popularity. Its editors after the death of the original author have endeavored to keep up with the march of chemical discovery and in succession first one apart, then another has been remodelled and additions made until the present edition is fully double the size of the edition of twenty years ago. In a work designed not only for reference, but also as a text-book for students, it is wise to be conservative in retaining the first arrangement as long as possible, but necessity sometimes enforces an entire recasting. This has been successfully done by Dr. Watts with the first part, which he had almost completed when his untimely death cut short his career of usefulness.

In the preceding edition the classification of the elements was made entirely on the basis of their atomicity. The present edition abandons this plan and arranges them into certain natural groups, which present much better the family likeness, as well as the differences of the similar elements.

Some transpositions of matter formerly following the description of the metalloids to a prior page in the introduction appear quite appropriate. An enlargement of the chapter on the relations of heat to chemical affinity would have been very desirable, in view of the importance thermo-chemistry has already attained, and the

still greater role it is destined to play in the near future. The organic portion has been reprinted unchanged from the last edition and to this no objection can be raised, as it had then been rewritten and an arrangement adopted, which will serve for some time yet as an excellent basis for the addition of new discoveries. It would have been well if some of the most important of these had been collected into a short appendix.

But even as it is, the work is one of great merit and usefulness, and offers in its new form such a fund of valuable information that it deserves to be in the hands of every one interested in chemistry. Curtman.

Visiting List for 1885. *P. Blakiston & Co., Philadelphia.*

The old familiar visiting list (L. & B.) now making its thirty-sixth annual presentation to the medical profession is well worthy of its great popularity. In its various forms adapted to the use of physicians seeing twenty-five, fifty, or one hundred patients weekly and at prices varying from $1.25 for the smallest to $3.00 for the largest it is convenient, serviceable and attractive.

The Medical News Visiting List For 1886. *Lea Brothers & Co., Philadelphia.* 30 patients; $9.00.

This new competitor for the favor of the profession is conveniently ruled, very handsomely bound in red seal with gilt edges and contains a judicious selection of such matter as will be most likely to assist in emergencies.

BOOKS AND PAMPHLETS RECEIVED.

Acne, Its Etiology, Pathology and Treatment. By L. Duncan Bulkley, A. M., M. D., etc. New York and London: G. P. Putnam's Sons & Co. 1885. 8vo.: pp. 280; cloth; $2.00.——A Treatise on Nervous Diseases; Their Symptoms and Treatment. By Samuel G. Webber, M. D., etc. New York: D. Appleton, & Co. 1885. 8vo.; pp. 415; cloth.——A System of Practical Medicine by American Authors. Edited by Wm. Pepper, M. D., LL. D., etc, Assisted by Louis Starr, M. D., etc. Vol. III. Diseases of the Respiratory, Circulatory and Hematopoietic Systems. Philadelphia: Lea Brothers & Co. 8vo.: pp. 1030; sheep.——Applied Medical Chemistry, A Manual for Students and Practitioners of Medicine. By Lawrence Wolff, M. D. Philadelphia: P. Blakiston, Son & Co., 1885. 8vo.; pp. 174; cloth.——Milk Analysis and Infant Feeding. By Arthur V. Meigs, M. D., etc. P. Blakiston, Son & Co. 1885. 12 mo.; pp. 102; cloth; $1.00. (St. Louis: J. H. Chambers & Co.).——Medical

Chemistry for Medical and Pharmaceutical Students and Practitioners. By Elias H. Bartley, M. D., etc. With forty illustrations. Philadelphia: P. Blakiston, Son & Co. 1885. 12mo.; pp. 376; cloth: $2.50. (St. Louis. J. H. Chambers & Co.)——Manual of the Diseases of Women. By Chas. H. May, M. D. Philadelphia: Lea Brothers & Co. 1885. 12 mo.; pp. 357; cloth. (J. L. Boland.)——Principles and Practice of Surgery. By John H. Ashhurst, Jr., M. D., etc. Philadelphia: Lea Brothers & Co. 1885. 8vo.: pp. 1118; sheep.——Epitome of Skin Diseases. By L. A. Duhring, M. D. Philadelphia: J. B. Lippincott Co. 1885. 24 mo.; pp. 130; cloth: 60 cents.——Post-Mortem Examinations. By Prof. R. Virchow. Translated by T. P. Smith, M. D. Philadelphia: P. Blakiston, Son & Co. 1885. 12mo.: pp. 138; cloth: $1.00.——Practical Surgery. By J. Ewing Mears, M. D. Philadelphia: P. Blakiston, Son & Co. 1885. 12mo.: pp. 794; cloth: $3.75; sheep: $4.75.——Physicians' Visiting List. (L. & B.) 1886. For from 21 to 100 patients weekly. Price, $1.00 to $3.00.——Poisons: Their Effects and Detection. By Alex. W. Blyth, M. R. C. S., F. R. C. S.etc. Vol. I. New York: Wm. Wood & Co. 1885. 8vo.; pp. 333; cloth. (Wood's Library.)——Reference Handbook of the Medical Science. Illustrated by chromo-lithographs and fine wood-engraving. Edited by Albert H. Buck, M. D. New York: Wm. Wood & Co. 1885. Square 8vo.: Vol. I.; pp. 808; cloth.——Science and Art of Midwifery. By Wm. T. Lusk, A. M., M. D., etc. New edition, revised and enlarged. New York: D. Appleton & Co. 1885. 8vo.; pp. 763; cloth: $5.00.——Essentials of Histology. By E. A. Schafer, F. R. S. Philadelphia: Lea Brothers & Co. 1885. 8vo.: pp. 245.—— Text-Book of Physiology. By M. Foster, M. A., M. D., etc. Third American from the Fourth and Revised English Edition, with extensive notes and additions by Ed. T. Reichert, M. D. With two hundred and seventy-one illustrations. Lea Brothers & Co. 1885. 12 mo.; pp. 911; sheep.——Fowne's Manual of Chemistry, Theoretical and Practical. A new American from the twelfth English edition, embodying Watt's "Physical and Inorganic Chemistry." With one hundred and sixty-eight illustrations. Philadelphia: Lea Brothers and Co. 1885. 12mo.: pp. 1056; sheep.——System of Obstetric Medicine and Surgery, Theoretical and Clinical. By Robert Barnes, M. D., etc., and Fancourt Barnes, M. D., etc. Illustrated with one hundred and thirty-one wood-cuts. Philadelphia: Lea Brothers & Co. 1885. 8vo.; pp. 884; sheep.——Text-Book of Pharmacology, Therapeutics and Materia Medica. By T. Lauder Brunton, M. D., D. Sc., etc. Adapted to the United States Pharmacopeia by F. H. Williams, M. D., Boston, Mass. Philadelphia: Lea Brothers & Co. 1885. 8vo.; pp. 1035; sheep.——The Management of Labor and of the Lying-in Period. A Guide for the Young Practitioner. By Henry G. Landis, A. M., M. D., etc. Philadelphia: Lea Brothers & Co. 1885. 12 mo.; pp. 334; cloth.——Diseases of the Tongue. By Henry T. Butlin. Philadelphia: Lea Brothers & Co. 1885. Small 8vo.; pp. 451; cloth.——Comparative Anatomy and Physiology. By E. Jeffrey Bell, M. A., M. D., etc. Philadelphia: Lea Brothers & Co. 1885. Small 8vo.; pp. 555; cloth.

REPORTS ON PROGRESS.

MEDICINE AND THERAPEUTICS.

Warburg's Tincture.—Dr. Warburg's own formula as first published in 1875, is the following:

℞	Socotrine aloes,	℔ 1.
	Rhubarb,	℥ 4.
	Angelica seed,	℥ 4.
	Confectio damocratis,	℥ 4.
	Saffron,	℥ 2.
	Fennel seed,	℥ 2.
	Prepared chalk,	℥ 2.
	Gentian,	℥ 1.
	Zodoria,	℥ 1.
	Cubebs,	℥ 1.
	Myrrh,	℥ 1.
	Camphor,	℥ 1.
	White agaric,	℥ 1.

These ingredients are to be digested with 500 ounces of proof spirit in a water-bath for twelve hours, then expressed, and ten ounces of quinine sulphate added, the mixture to be replaced in the water-bath till all the quinine is dissolved. The liquor when cool, is to be filtered, and is then fit for use.—*Am. Pharmacist*, Oct., '85.

The Therapeutic Use of Iodoform Collodion, Especially in Neuralgias.—Dr. William Browning gives his experience with this remedy for external application. The strength usually employed is one part of iodoform to fifteen of collodion. A half ounce is usually sufficient for any ordinary single application. Dr. Browning has found it most effective when painted on in very thick layers, which may be conveniently done with the usual camel's-hair brush. As soon as one coating becomes a little firm another is applied, and so on until it appears to have an average thickness of

one-half mm. In the neuralgic cases a cure, when effected, was usually accomplished with one or two applications.

The class of troubles found most amenable to this treatment was narrowly localized neuralgias, especially when corresponding to some particular nerve and not dependent on any demonstrable lesion. In fact, if a neuralgia, or what is thought to be one, proves intractable to this means, we should doubt its being a purely functional affection, and look carefully for some tangible cause. It has thus a certain diagnostic, as well as a therapeutic value. Several times its complete or partial failure has led to a more searching and successful examination. Even in such cases much temporary relief is often afforded.

Supraorbital neuralgias, even of malarial origin, particularly if the miasmatic infection dates back some time, seem quite amenable to this treatment. Of course it is not recommended as a substitute for quinine here, but only as an adjuvant where the latter fails or acts too slowly.—*Am. Jour. of the Med. Sciences*, Oct., '85.

OBSTETRICS AND GYNECOLOGY.

History of a Case of Twice-Performed Cesarean Section, Under the Late Prof. William Gibson: With an Autopsy of the Patient Made Fifty Years After the first Operation.—Drs. Caleb W. Horner and Robert P. Harris give the history of the famous case of twice performed Cesarean section, by the late Prof. Gibson, and an account of the autopsy made fifty years after the first operation.

This case is not simply a curiosity of surgical experience. That she twice recovered is not so remarkable, when we consider that five other women in the United States have done the same thing. The danger in these cases is mainly after the first operation, except in those where the mother has fallen into bad health, as occurred in two instances in the United States. A third woman died after a third operation, from the same cause. The lesson to be learned from these recoveries under the first operation, and from others that have been operated upon once only, and with full success, is that it is all-important to give relief to the patient as early as possible.—*Am. Jour. of the Med. Sci.*, Oct., '85.

Lactation and Medicaments.—Feihling has studied the effect upon the nursling of certain medicaments administered to the nurse.

If two grammes (half a dram) of salicylate of soda are administered, this substance is readily found in the urine of the new-born. The passage is specially marked when the drug has been absorbed two hours before the nursing.

Iodide of potassium acts like the salicylate of soda.

Iodoform, even when used in very small quantity, passes into the milk. A simple sprinkling of this drug upon the vulva, is sufficient to secure its appearance in the mammary secretion.

It was not so with corrosive sublimate, of which it was possible to discover in the milk only very small quantities, such that it was impossible to estimate them.

The narcotics are without effect upon the nursling. The strongest doses of opium or of chloral administered to the nurses have not produced any special physiological effect upon the nursling.

Atropine tested upon animals produced dilatation of the pupil in the nursling only when the maximum therapeutic dose was exceeded.—*Bull. de Therap.* Aug. 30, *Lyon Méd.*, Sept. 13, 1885.

Lacerations of the Cervix.—Dr. John Bartlett suggests that the examination to determine whether or not the cervix uteri has been lacerated in labor should be made just as the placenta is beginning to occupy and distend the cervix, instead of after the entire emptying of the uterus. The examination can then be made much more satisfactorily to the patient and with less discomfort and annoyance to the patient than at the later moment.—*Chic. Med. Jour. and Ex.*, Sept., '85.

Excessive Vomiting of Pregnancy Instantly Relieved by Ether Irrigations upon the Epigastrium.—A young woman, primipara, of feeble constitution, had frequent vomiting since the second month of pregnancy. At the fifth month the vomiting became more persistent and was accompanied in the intervals with nausea, fainting and general malaise. In a few hours they became so frequent that they succeeded without interruption, producing syncope, absolute prostration of power, noises in the ears, chills, cold and profuse sweats, frequent and filiform pulse. Her life was manifestly in danger.

Means the most varied to arrest this vomiting had been employed without result. In their turn anti-spasmodics had been used (ether, valerian, musk), then opiates, chloral, carbonated and iced drinks, iodine, internally and externally, blisters upon the epigastrium, hypodermic injection of morphine, ether, etc.

Toward evening, Dr. Rodrigues Mendez having been called in consultation, it was suggested to try irrigations of ether upon the epigastrium. The effect was instantaneous. A single irrigation sufficed to cut short the vomiting. The patient drew a few long breaths, said she was cured and felt perfectly well.

Later the vomiting returned twice, and each time the ether irrigations arrested all trouble.—*Arch. de Tocol.*, Sept., '85.—*Lyon Méd.*, Sept. 13, '85.

The Choice of Methods in Abdominal Delivery.—Dr. R. P. Harris shows that it is in vain to practise gastro-hysterotomy in the United States unless it is done in good season. Since January 1, 1875, twenty-nine out of thirty-eight cases have ended fatally, and twenty-one children were extracted dead, leaving seventeen, of whom four soon perished from causes occuring before delivery, twenty-eight were in labor from one day to two weeks, and fifteen of them more than three days.

The operation has been improved by the introduction of the uterine suture, and lives have been saved that must otherwise have been lost; but no change in the old operation can compensate for the delay and intermeddling so generally indulged in (where the knife is the only remedy that promises success), to the fatal termination of the case.

The Saenger modification with its simplifications has been performed twelve times, saving six women and ten children, of which five cases belong to the credit of Dr. Leopold, of Dresden, who saved four women and five children. Of eight German cases, six recovered. These women were in labor respectively twelve hours, eight, thirty, "some hours," and sixteen hours, and one not mentioned. These cases marked "favorable" by reason of their condition before the operation all recovered.

Laparo-elytrotomy also numbers twelve cases, with six recoveries, and seven children saved. Nine of the cases belong to New York City and Brooklyn, where six women and five children were saved. The six women were in labor respectively, eleven hours, four days, sixteen hours, a week, eight hours, and twenty-two hours. There were four "*favorable*" cases among the twelve, all of which recovered. These two cities have a credit of eleven Cesarean operations, saving but two women and two children. In ten, the prognosis was "*unfavorable*." In cases made more serious by delay,

laparo-elytrotomy promises better than gastro-hysterotomy, and should be preferred to it. It also promises more favorably for British cases, as far as we can judge by New York, where the mortality was formerly equal to that of England.

The Porro-Cesarean operation Dr. Harris shows is *par excellence* the method for hospitals, where the women should be under anticipative treatment and operated upon very early in, or just prior to, labor. The Müller modification is preferable where the placenta is upon the anterior uterine wall, or the fetus dead and putrid.

Dwarf subjects require that the delivery under the knife should be effected very early, as exhaustion occurs after a short effort of nature, and death is apt to result in such cases. The Porro operation has been the most successful in the cases of dwarfs.—*Am. Jour. of the Med. Sci.* Oct. 1885.

Cesarean Section by an Ox.—Dr. J. Z. Scott reports a case in which a woman who was near the full term of pregnancy was gored by an infuriated ox, the horn of the animal entering at the anterior superior spinous process of the ilium and extending to the umbilicus, and involving not only the abdominal but the uterine wall. The child was extruded through the wound about a half hour after the accident. The doctor found the child fully expelled but still attached to the cord which he accordingly tied and cut. As there was no dilatation of the os uteri he removed the placenta through the wound and applied a bandage. The patient being almost lifeless from shock and hemorrhage he administered morphine and whiskey. The next morning as the woman was still alive the wound was closed with interrupted sutures and the morphine and whiskey were continued. The woman lived until 10 p. m. of the day following the accident.—*Med. Age*, Aug. 10.

The Cure of Extra-Uterine Fetation by Electricity.—Dr. Henry G. Landis thinks that it may be regarded as an accomplished and proven fact that electricity in some form is a specific cure for extra-uterine pregnancy. It arrests the growth and destroys the vitality of the embryo and cyst, and its use is followed by a truly remarkable disappearance of all or the greater part of the growth in a short time. This at least is true when the electricity is used during the first half of the pregnancy. As we approach the period of vitality in the child the risk of rupture of the cyst diminishes, and the propriety of surgical interference at or near term becomes greater.

The great advantage of the Faradic current over all other forms of electricity has been shown, but opinion is not yet settled as to whether we should use a local current for a long time or a strong current briefly, and how many repetitions of the application are necessary. To determine these points he has conducted a series of experiments based upon the supposition that success is achieved by the death of the embryo; the specific value of the method being that the fetus will surely be killed if it gets a large enough dose of the current, and also based upon the supposition that the fetus is in the matter of vitality to be compared with some of the lower forms of life.

Dr. Landis draws the following conclusions:—

1. In using the Faradic current in extra-uterine pregnancy, the applications should be protracted for an hour, if the patient can bear it.

2. The current should be repeatedly applied, in order that the vitality of the fetus may be finally exhausted.

3. The current should for at least one sitting be used in great strength.

4. The current probably acts, not only by destroying the fetus, but by its action upon the placental circulation; an additional reason for a long application.—*Am. Jour. of the Med. Sci.*, Oct. '85.

A Club of 4,800 members in Berlin, recently advertised for six medical officers to attend them at a salary of $375 per annum. This would make the contribution from each member of the club about seventy-five cents a year for medical attendance. More than four hundred doctors applied for the place.—*Med. and Surg. Rep.*, Oct. 10.

The Will of Dr. J. L. Atlee bequeaths $1,000 each to the Lancaster Orphan's Asylum, The Bishop Bowman Church Home and St. James' Episcopal Church. His surgical instruments go to his son, Dr. W. F. Atlee. The remainder of the estate which is valued at $250,000 is given to the direct heirs.

Dr. Richard McSherry, of Baltimore, Md., died October 7 in his sixty-eighth year. He had practised medicine in Baltimore for thirty-four years. He wrote much for the eastern and southern medical journals.

SOCIETY PROCEEDINGS.

ST. LOUIS OBSTETRICAL AND GYNECOLOGICAL SOCIETY.

Stated Meeting, October 15, 1885.

Maternity Hospital, New York—Antiseptic Obstetrics.

Dr. Briggs gave an account of a visit last August to Charity Hospital, Blackwell's Island, New York, and asked permission to read a communication written at his request by Dr. Wm. Moore, Obstetric Surgeon of that Institution. (Vid. p. 500.)

Dr. G. A. Moses.—I have been greatly interested in the details of antiseptic measures adopted. No one who has not visited the enormous hospitals of New York has any conception of the mass of people taken to them. Three years ago, through the kindness of Dr. Lusk and other surgeons connected with the hospital I was shown through their departments. Those in charge were particularly disturbed at that time by the great prevalence and mortality of puerperal disease. The "Emergency Lying-in Hospital," under the care of Dr. Lusk, had just been established, and it was due to his efforts perhaps that methodical antiseptic practice was commenced. This emergency hospital is filled with women who are found in labor on the streets and brought to the institution. Its inmates are therefore very low, depraved and filthy, and constantly affected with syphilis and gonorrhea. When these women are brought into the hospital the first thing done is to wash them before taking them into the lying-in room. Each patient has an antiseptic bath in which carbolic acid is used, or something of the sort, but not mercury. She is then taken into a small room in which she is confined separately. Oakum from the ship-chandlers was put around about the pudenda and when this had become wet with the excretions it was burned and a fresh piece placed about the parts. Under this method of treatment the mortality was won-

derfully reduced in this hospital under the very worst auspices. Of course they took the greatest precautions to prevent the introduction of any septic material into these wards, and the house surgeons were prevented from entering them because the general hospital was always filled with the worst sorts of cases. In our private practice among the better classes of our patients, where they take care of themselves and have good nurses and careful attendants, these precautions are not necessary. Still not unfrequently, the patient is apt to be exposed to septic conditions so that the greatest precautions should be taken in these cases. In regard to the pressure of the band about the breast there are some cases in which it is advisable to use a bandage, but I think it should be used rather to keep the breasts from falling than for producing any great amount of pressure.

I don't recall anything else especially in the treatment or management which has been detailed by the doctor except this, that he says that for eight days the patients are confined upon their backs; I think that is bad practice. It is my rule to insist upon a patient's lying upon her side; of course not constantly, but I prefer that they should change from the back to the side occasionally. I think this assists in retaining the womb in its normal position. The dorsal position certainly favors the aggregation of secretions within the vagina, whereas an occasional change of posture to the side assists their discharge. It does this simply through gravity. Since my visit to Dr. Goodell's hospital some seven or eight years ago, I have been in the habit of not only allowing but rather urging my patients, unless there was some contra-indicating condition, to get out of bed on the second or third day, certainly when they desire to empty the bladder and have an action of the bowels. And I do it for the reason that it assists the discharge of the secretions from the vagina. I do not like to use vaginal douches unless there is some necessity for it. I think in some cases it really does harm, and unless there is very good reason for using them I generally let them alone. I much prefer that the patient shall rise and sit up in a sick-chair. Generally, the first thing in the morning my patients rise and empty the bladder and allow the bed to be aired and made comfortable. I have never seen it do any harm. I have one patient whom I have attended constantly for five or six confinements and who is decidedly opposed to the use of the catheter. This lady soon after her confinement sits up and empties the blad-

der even before I leave the room and I have never seen it do any harm. Of course it is always done cautiously. It is Dr. Goodell's plan, and has been for several years, to allow his patients to sit up for the purpose once or twice a day; and he says he has never seen any harm come from it. The occlusive bandages of Dr. Garrigues have received very high commendations; I am inclined to think they are not the best treatment.

Dr. Boisliniere.—I think Dr. Moses' remarks are true so far as they apply to the management of patients in hospitals, but I do not think that these measures which have been recommended in the paper can be generally used among our patients. It comprises so many precautions and so many details that it would be annoying and very disagreeable to many of them. Of course we know that cleanliness is one of the best antiseptics, and we make use of it in one way or another to as great an extent as possible. The absorbent material referred to in the paper is a very good thing to use to prevent antisepsis; it is a very good filter for germs and an admirable thing. I use for that purpose borated cotton a great deal; it is a very good thing and cheap enough. I don't use the vaginal or uterine douches unless there are offensive discharges from the parts. If there is an offensive discharge I wash out the vagina carefully. I am afraid of the corrosive sublimate, because cases have been reported even where a 1–1500 or 1–2000 solution has proved poisonous. I think Listerine is an admirable antiseptic. I used these cotton pads for some four or five years, but I think Dr. Garrigues' pad is a very good although troublesome thing to use unless by a very competent nurse. It is made of small folded compresses which are applied to the vulva and, after becoming filled with excretions, are burned. In this regard they are to be recommended because they are easily destroyed and do away with having a number of foul towels lying about the room. I must however say that Dr. Garrigues is a high authority, and his views should be received with respect and his plan tried under proper circumstances. I would like to say, however, that puerperal fever is a very rare disease; years and years pass without a single attack in this city, and the mortuary reports last year showed that there were not more than five or six deaths from it in the whole of this city. Unless during an epidemic there are very few deaths from puerperal fever; some years we have none at all. The result obtained in this New York hospital may be due to the

fact that there was an absence of any disease of this character, at least in an epidemic form.

I think that the method which has been detailed here should be, as far as practicable, carried out in every lying-in hospital, and the plan of burning sulphur in the rooms where a woman has been confined is very good, but all this routine is generally unnecessary in private practice. Common disinfectants, cleanliness, absorbent, borated cotton, if these are used we will get along very well, and I do not think there will be any danger of infection. I do not think it is necessary to wash out the vagina unless there is an offensive discharge. Then I would wash it out carefully, and if there was fever I would also wash out the uterus.

In regard to thrombosis and embolism, I think that embolism is an exceedingly rare accident. We have had very few deaths from embolism in this city, very few reports of deaths in our society. I have seen two or three fatal cases and an equal number who recovered; and they occurred some two or three weeks after confinement.

Certainly, I think the practice spoken of by Dr. Moses of allowing the woman to rise a few hours after confinement in order to empty the bladder is very commendable, and also good and safe practice to allow them the next day after confinement to sit up in bed, propped up by pillows for a short time, in order to take food, because by this means the secretions in the vagina are allowed to escape. I think the weak point in the paper which has been read is the statement that the woman is to be kept upon her back for eight days without raising her shoulders.

Dr. Papin.—I think Dr. Boisliniere stated a moment ago that where the discharge was offensive and there was no fever he would wash out only the vagina, why do you object to washing out the uterus?

Dr. Boisliniere.—Because I am afraid if the womb is very patulous that there may be danger in injecting the womb. I think we run some risk unnecessarily then, a risk, which we have however, to take if, besides the offensiveness of the secretions, there is also fever. We have then at all hazards, to fight against septicemia.

Dr. Papin.—The stream is not apt to go into the Fallopian tubes if the uterus is patulous.

Dr. Boisliniere.—The vagina is not very deep shortly after confinement because the uterus comes down very low. I would not

hesitate to wash out the uterus in case of necessity, but I would direct a slow stream and a small quantity of water so as not to incur any unnecessary risk; there are dangers in making injections into the uterus. I had a case in which an injection into the vagina caused intense uterine colic. The injection was given about two weeks after her confinement. I think that too much force was used and it went into the womb, so that I will not use those injections into the vagina unless it is absolutely necessary and then only very gently; if there was fever I would inject the uterus.

Dr. G. A. Moses.—In alluding to the after treatment of the patient the doctor in the paper says "after she had her ergot" as if that were a standing rule.

Dr. Boisliniere.—I think that providing the binding of the breasts recommended in the paper be not carried too far, it is very well; carried too far it will stop the secretion of milk. This might be desirable in some cases and in other cases objectionable. I do not approve of the use of nitrate of silver to the eyes of newborn children. This method inaugurated by Credé will find very few imitators in America.

Dr. G. A. Moses.—That is the rule in the Vienna hospital and all large German hospitals; they either use nitrate of silver or carbolic acid.

Dr. Boisliniere.—I suppose that it is upon the theory that most of the children born of these woman have venereal troubles.

Dr. Coles.—I would like to ask Dr. Briggs if he knows the method by which the breast binder is put on?

Dr. Briggs.—I saw one patient after she had been put to bed, and it was a most interesting sight. An exquisitely neat nurse threw the clothes off the woman to show us the binder. It reached from the mons to the breast, smoothly applied. It seemed to be continuous from the mons up above the breasts and pinned at regular intervals. The material was exceedingly flexible. It looked like cheese cloth wrapped in several thicknesses and fitting snugly. The binding was evidently the result of long experience and the nurse took a pride in it. We went into the room unexpectedly and it was a chance case.

Dr. Coles.—I have been very much interested in the paper. There are several matters of detail, however, which I would like to have heard more in particular. In regard to the classes of women that are confined in these charitable hospitals in New York,

I will say that I have had some experience in the matter myself; and while there are a great many such women taken care of as have been referred to by Dr. Moses, there are also a great many young girls as typically healthy women as can be found anywhere, women who are not tainted with syphilis or anything of the kind. One of the reasons probably why we have a larger per cent. of mortality in these charity hospitals than in private practice is because a larger portion of the women delivered in them are primiparæ. They are young, unmarried women who are taken in to be confined with their first children. This must be taken into consideration in accounting for the greater mortality in the charity hospitals; it is always the case.

Now in regard to the use of chloroform. The doctor doesn't say anything about that in his paper; he speaks of the routine treatment but does not mention whether they give chloroform or not. When I was in Bellevue, chloroform was given to very few cases, only in those cases where there were puerperal convulsions or something like that. They were generally put upon what we called a "pony." A pony is nothing more than a single bedstead with a long loop of rope attached to the foot which the woman catches hold of, just as one would of the reins of a horse or pony, and pulls on this rope.

In regard to the pad which is applied to the vulva, I must confess that I do not exactly understand the philosophy of it. We all know that hospitals are apt to have every few years an epidemic of puerperal fever, but I think that in the majority of instances where we have puerperal fever in private practice the septic trouble arises from an autogenetic source, from within the genitals. Now if you apply a pad and put it tightly over the vulva as this pad is represented to be placed, it seems to me it is "occlusive" and prevents the escape of blood-clots and other secretions which must be present to a greater or less extent in all cases of labor, especially in multiparæ, and, I have found, especially after you have given chloroform. There is no doubt that the uterus does not contract as perfectly when you have used chloroform for any length of time as when labor is conducted without it. I am well satisfied of this fact from my own experience and observation. And when there are clots within the uterus and their escape by the vulva is prevented, we are more apt to have septic fever than where they are allowed to pass off freely. I should think that a pad fitting as tightly as

this, although it might allow the liquid secretions to flow away by absorption and permeation, still would retain the clots which might lead to evil results, even though the bandages are removed as we have seen they are, every four hours. Now, as the woman is kept upon her back, although the pad is removed, the clot will probably not come away, because she is not allowed to move, so that it is possible that it may be retained in the vagina twelve or sixteen hours. While it is very well to put an antiseptic dressing over the vulva, I do not believe that it is judicious to confine it tightly by strips behind and in front. Nature has provided for the escape of all excretory products by the mouth of the uterus; this is the best way to get rid of excrementitious material, and we ought to offer every facility within our power for these excreta to be quickly carried away. While some absorbent material is well enough to protect the bed and the garments of the female, her legs, nates, etc., yet at the same time it seems to me that a tight pad put there and fastened up against the vulva would have a tendency to prevent this escape, which would be injurious.

Dr. McPheeters.—That is the very point at issue. The question is whether the germs are from without or within, he assumes that they are from without.

Dr. Boisliniere. —That is an assumption.

Dr. McPheeters.—The object of the pad is to exclude the air and prevent the introduction of poisonous material, and his assumption is that the trouble is not autogenetic but from without.

Dr. Coles.—I think the best argument that in the majority of instances the trouble is from within by the secretion being retained, etc., is the fact that if we enter the lying-in room within a few days after delivery and can detect a disagreeable odor in the lochial discharge, we may suspect that there may be some clots which produce this state of things; and generally, as soon as these pass away, the foul odor and all febrile symptoms subside and the patient is relieved of pain. Three or four days or a week after confinement we may find pain or soreness, it may be in the uterus or it may be in the broad ligament; and we will see that if the clot passes away, the febrile and local symptoms will also subside and the patient be relieved. This is certainly the rule in private practice.

Dr. Boisliniere.—I think the doctor's argument is supported very forcibly by Dr. Meigs, who says, that if a pad is applied too

tightly to the vulva it may favor the retention of clots, etc., in the uterus, or it may favor the production of intra-vaginal hemorrhage, the distension of the vagina may be so great as to retain the clot and it may be a cause of disease in that way. I think Dr. Coles is right in his statement that the larger proportion of cases of septicemia are autogenetic; they are caused by the decomposition and absorption of puerperal matter, in the vagina or in the uterus, and possibly putrescent remains of the membranes left in the uterus.

Dr. Gehrung.—I think this pad which is used must have a tendency to retain the excretory substances in the vagina, whether it is tight or not. In a hospital of that kind it may be of great value, but in the ordinary hospital or private practice I don't think that treatment could be well applied, because the septic infection in private practice and in the ordinary hospital is probably more from within than from without. In these cases at the hospital, where patients are so carefully attended, there is very little expectation of internal infection. As the case which has been described is one of a normal labor we cannot reason how cases are treated where there is infectious disease of any kind present. That would be very interesting to know.

Dr. Briggs.—They mention results in all cases in their statistics.

Dr. Gehrung.—Yes, but I am speaking of the pad treatment; the case which you have related in the paper is an ordinary normal labor case; the treatment of a case where there was a complication I suppose would be different. I think in private practice the treatment which has been described in the paper would not be applicable, and our patients would not be satisfied with it. I do not think that the use of the pad is to be recommended. I prefer to have a free exit for all the secretions, and for that purpose as well as to avoid the abdominal binder, I direct my patient not only on the next day but actually from the very beginning to change her position from the back to the side and to increase the movements from hour to hour and from day to day. The muscles of the abdomen will be strengthened by these gradual movements. I think that the binder actually becomes superfluous under such circumstances, and the idea of keeping a patient upon her back eight days without raising the shoulders, I think is much more injurious than permitting her to raise her shoulders and change her posture gradually from the time of her confinement; because she is thereby totally

unprepared to make any movement at the end of that time, and is in a worse condition to rise than she would have been immediately after confinement. If a puerpera is kept in one position for so long, the abdominal muscles must become very much relaxed, whereas, if she is allowed to change her position and exercise the abdominal muscles gradually, I think it will not be necessary to use a binder of any kind.

Dr. Barret.—I do not think there is much doubt that the discharges of all puerperal women are infectious. Some gentleman has made an experiment of taking these discharges, injecting them in dogs, and testing them in various ways; and he thinks that the discharges are poisonous the next day, and in some instances within a few hours after confinement; and that the infectiousness of the discharge is diminished in proportion as time passes by; that is, the discharge on the second day is not so infectious as that on the first day, the third day is less than the second and so on. Now I hardly like to pen up poisonous discharges in an abraded and lacerated canal, as the genital canal must necessarily be after confinement; and in the use of this pad it seems to me they are pushing things a little too far. Wherever there is any dangerous fluid in the body the first thing is to drain it out certainly, and that brings up the question which has been alluded to, the propriety of the supine position after confinement. I don't believe it is best to keep the woman lying down; I think there is no reason why she should not get up. I think the sooner she gets up the better. In regard to the binder I think it serves a useful purpose. Immediately after confinement the abdominal walls are lax, and the muscles are worn out apparently from over-distension by the pregnant organ. From the efforts they have gone through in labor they are worn out and relaxed, and the abdominal bandage gives temporary support to the muscles, braces the uterus and partially stimulates uterine contraction. The woman always feels better when she gets a bandage on; but I think the use of a bandage like that may be overdone, and when it is kept on too long, or applied too tightly, it destroys the functions of the organ and muscles, because no organ and its function can remain intact except by being used. I think that the use of the bandage perhaps as a temporary support is a very good thing, but it should not be used after the first few days.

I believe that early rising, where there is no contra-indication, no inflammatory trouble, no post-partum wounds or injuries to

prevent it, is the best practice, because it favors drainage and favors the contraction of the uterus. I am sure that the women who get up early do better than those who get up late.

Dr. Prewitt.—I am satisfied that the members will doubt the propriety of the use of the pad. It seems to me that nothing more unsurgical could be adopted. I don't agree with Dr. Coles in regard to autogenetic infection as the result of decomposition of clots being the cause of all this trouble, and I say this not because I don't believe that occurs. But as to what Dr. Barret states, that some one's experiments show that the lochial discharges are poisonous from the outset, I think that is a mistake. You may take a girl who has a vagina and uterus well filled up with blood, yet she is not poisoned by it. I believe it is poisonous because the discharge comes in contact with the air, and there are set up changes that lead to a septic condition. The germs of infection are already there. If they are going to use the pad with the expectation of accomplishing anything good they ought to be sure that the uterus and vagina are absolutely aseptic. They should adopt some means so that they would feel satisfied there were no germs, no source of infection in the uterus or vagina, and then they might use the pad, and I don't think it would cause any trouble, because I don't think there is any septic poison in the uterus. One would not expect that the discharge half an hour after the birth of a child would be poisonous in its character; but of course when it comes in contact with the air it rapidly undergoes changes so that it is rendered septic. Just so long as it is protected from the air it is not septic, and the only means by which a pad applied to the genitals should be of use or in which it would be a rational proceeding at all, would be by first utterly securing an aseptic condition of the uterus and vagina, then after that put on the pad and plug up the vagina and keep it so, and so long as the contents of the cavity could be kept free from contact with the atmospheric air I think the contents would not be poisonous. But it is almost impossible to do this, under even most favorable circumstances, even if we were to envelop the whole lower part of the abdomen we could hardly keep the genital tract so perfectly from contact with air, that the discharges might not become putrid and poisonous. I do not think that this can be accomplished with any sort of pad.

Dr. Barret.—You might do it by careful washing of the parts before applying the pad.

Dr. Prewitt.—I think it is extremely doubtful; but I say that is the only way in which the use of the pad would be a rational procedure; that is, by rendering the vagina and uterus and the surrounding parts perfectly aseptic and then by using an antiseptic dressing to the lower part of the abdomen and pudenda.

Dr. McPheeters.—I think it should be said in justice to this procedure that I don't think it is the intention to prevent the lochial discharge from escaping; I think this dressing is absorbent and it absorbs the secretions rather than serves to retain them.

Dr. Prewitt.—The trouble is not with the discharges after they get outside the cavity.

Dr. Briggs.—I don't think that it is the intention that the pad should serve the purpose of keeping the secretions in the cavity.

Dr. Prewitt.—I rather gathered from the tenor of the remarks which were made that that was the intention in applying it.

Dr. Briggs.—I do not think it was intended to convey that idea.

Dr. Barret.—I think Dr. Prewitt is correct; I entirely agree with him so far as regard these discharges becoming putrid in the large majority of cases, perhaps in all cases, only by contact with the air. But there is no process of washing at any time during labor or any time after labor by which you can prevent the entrance of germs, if germs are in the air. There is no way in which you can exclude the air and there is no pad you can possibly apply which will exclude the air, so that the washings from the pad must necessarily be infectious. So far as preventing infection is concerned the mechanical effect of the pad must be detrimental I think.

Dr. Briggs.—Why doesn't it show it in the results then?

Dr. Barret.—A hospital may go for a number of years without having any puerperal fever at all and then an epidemic may break out which will carry off a great many lives.

Dr. Yarnall.—When I was in Paris I understood the mortality was reduced a great deal by allowing the patients in the institution to get up within twenty-four hours after delivery. Every patient is required to sit up the day following labor in order to secure drainage, and in my private practice I must say I have had no bad results in following this practice. The first thing I do after the woman is delivered and I have given her ergot is to say "you are not required to lie upon your back; I prefer that you should turn

upon your side; I expect you to sit up in bed the day after labor and every day, and on the fifth day after that to get out of bed, have your bed aired thoroughly each day and remain out a longer time each day." Of course I require them to keep comparatively quiet for thirty days, but from the fifth day I have them sit up every day for a greater or less length of time. I cannot see the necessity for requiring those patients to lie upon their backs for eight days.

Dr. Briggs.—I am not favorably impressed with the regulation that the patient shall lie upon her back for eight days. Change of posture would favor the discharge of clots. But with regard to the retention of the lochial fluids, from what I saw it is my impression that the pad is not put on tightly, and does not retain the secretions nor is it intended to do so.

Dr. Papin.—If you put a bandage on tightly, although the liquid discharges may not be prevented from escaping, if there are any clots of blood, these may occlude the channels of escape and so cause retention of the fluids.

Dr. Briggs.—The pad we are speaking of is applied like a baby's diaper and holds the fluids and prevents soiling of the clothing.

Dr. Prewitt.—Was not something said about the intention of preventing sepsis by having it act as a filter?

Dr. Briggs.—The cloth placed on the genitals before the child is born, and the pad applied after the birth seem to be intended to prevent the entrance of septic germs.

Dr. McPheeters.—This discussion shows very clearly that even at this very late day the very A,B,C's of professional life are still in dispute. It seems that there is hardly a step in natural labor about which there is not some diversity of opinion leading to a difference in practice. The paper read is an interesting one, giving as it does a detailed account of the antiseptic treatment as practised in that hospital. I agree with Drs. Boisliniere and Moses that while it may be a good thing in a lying-in hospital it is utterly impracticable, and I believe wholly unnecessary, in private practice. Then there are some points in the paper that I think are not good practice. For instance, it is unnecessary that the patient should be kept eight days on her back. Then again, in regard to the pad I do not believe that it is good practice to resort to anything that tends to retain the lochial discharge, and so far as it does this it is injurious. But if the object be simply to ex-

clude the atmospheric air, there can be no serious objection to its use. I think Dr. Moses has stated the true use of the breast bandage. I am in the habit of supporting the breasts by a bandage around the body whenever they are so large and over distended as to give pain, but not applying pressure enough to retard the secretion of milk. Dr. Barret has stated what I believe to be the use of the abdominal binder. I am in the habit always of using it because it gives needed support to parts which have been greatly distended during pregnancy and now become suddenly relaxed: besides it is always agreeable to the patient. Of course the binder may be kept on too long and thus tend to destroy the natural function of the muscle. To avoid this my plan is to direct the nurse, after it has been worn for awhile, to use friction over the abdominal muscle and only to keep it on so long as it is necessary. With regard to this ten-grain solution of nitrate of silver being used in the case of new born children, I confess that I should be afraid of it. In nineteen cases out of twenty it is unnecessary, and when anything at all is needed, I should resort to a far weaker solution.

ST. LOUIS MEDICO-CHIRURGICAL SOCIETY.

Stated Meeting, October 13, 1885, Dr. Todd in the Chair.

Observations in Gynecology Made Abroad.

Dr. Engelmann said that although we receive journals from everywhere so that it hardly seemed worth while to speak of the practice elsewhere which we read of so extensively, he had been led to do so by a realization of the great difference between seeing the practice and operations and reading accounts in the journals. By reading we gain only major points—facts about large operations, about general methods of practice; but with regard to the practice itself we glean but little. Although reading the journals constantly, at least in his own department, he was not at all prepared for what he saw. We read the published accounts and then judge them by our own habits of thought and our own methods of action. He thought this explained some of the minor quarrels and much of the ill feeling existing between practitioners. Men quarrel about matters of which they have no understanding. They, for instance, will ridi-

cule methods or instruments which are used elsewhere, when they do not know what they really are. For instance, Sims' small cotton extractor, as we have it here, is a delicate instrument not quite as thick as the ordinary uterine sound and intended to enter the cavity and remove such bits of cotton as may have been left there. That instrument is found in the stores at Paris and Berlin as thick as a pencil and precisely the same thing that we have on the end of a ramrod. Of course it is not used there, and probably they marvel a great deal that such an instrument should be claimed to be of value for that purpose. So foreign instruments are seen here which do not at all resemble the originals.

For some time he had seen reports of the work done in electro-therapeutics in Paris, and was present at Copenhagen when Dr. Apostoli read his paper, but did not go to the session where the paper was read, because it seemed rather extravagant to talk of the treatment of large uterine fibroids by electricity in preference to the knife and the treatment of cellulitis with electricity. The statements of the wonderful results met with general discredit; but on attending the clinics of the gentleman at Paris, Dr. Engelmann himself saw the operation repeatedly and found the results as astonishing as they were claimed to be. So there are a great many points that one will not appreciate from the literature, but which will appear in a very different light when seen. Probably no one here would practise gynecology without an applicator and a tenaculum—yet these are instruments which in the French clinics one will not find. He endeavored to buy in Paris some instruments for use in the clinic here, expecting to get them cheaper, but could not get an applicator or tenaculum in Paris; they have no use for them. So one can imagine that their treatment is entirely different.

Another matter which seemed strange was that artificial light is almost invariably used. Perhaps the reason is that the clinics are located in narrow streets with high houses on either side; at any rate a little illuminator such as we find here at Leslie's or Aloe's is used in almost every case; in making examinations or showing a case to students.

The speculum is universally used upside down, as it were; at least we use it here with the branches which are meant for distending the blades turned downwards; it is used there invariably with those branches turned upwards.

The treatment is to us peculiar, since intra-uterine applications

are so very rarely used. The nearest approach to an applicator which he saw was at one of the most prominent lying-in hospitals in Paris, where they also have a gynecological clinic. A little brush for cleaning pipe stems was used as a kind of dull curette and general irritant to the uterus. This was dipped in the remedy and applied; or it was used as a kind of curette. The professor seemed very much gratified with the results when used for the purpose of removing small granulations.

The general practice is little beyond what it was ten years ago. A very common method of treatment, which by the way is a very good one, is that of using in place of cotton tampons, little bags filled with some mild astringent, for instance, alum mixed with some inert ingredient or oak bark. Mild disinfectants are also used, filling a little semi-circular bag which is used as a support in displacements and at the same time medicates the tissues.

But the one decided feature, which was new to Dr. Engelmann, and which he hardly believed to be possible was the use of the galvanic battery in the treatment of uterine diseases. This gentleman treats all uterine diseases with electricity. This is, of course, overdoing it; and in many instances it is a very circuitous route. Erosions are treated by the application of a very mild cautery; but the main purpose for which it is used, and in which it yields astonishing results is in the treatment of uterine fibroids. The statements in the papers which have been written on this subject seemed almost preposterous; but from the history of the patients from the plaster casts made of the cases Dr. Engelmann was convinced that the statements made are true. For instance, a large solid fibroid which reached perhaps two inches above the navel was reduced to half its size, the upper portion being perhaps three inches below the navel after some four or five applications. The instrument used is a stylet perhaps rather thicker than the upper portion of this pen (he held up an ordinary tapering pen-holder), which is plunged into the tumor almost to its entire depth, from three to four or five inches, and a very powerful current is kept up for five minutes. Of course a large hole is left. It is not actually a galvano-cautery; but it has a certain electrolytic effect. The Leclanché cell battery is ordinarily used; but we might as well use the zinc and carbon elements, provided we have sufficient force. Probably twenty or twenty-five of the Lelanché elements of the size now commonly used for operating electric bells are employed.

The patient is treated at the clinic and goes home, and does not suffer in consequence of this treatment sufficiently to prevent her attending to her daily duties. If the ordinary galvano-cautery were used it would be very different. This instrument is passed once or twice a week into the tumor—once a week except in extreme cases—and the operator passes the instrument for the first time above the cervix into the mass, then below, then to one side, then to the other, then between these punctures, so as to cover the greatest possible amount of space. The same treatment is used in case of cellulitis. The patient receives this treatment at the office and goes home. It is only when the application is made for the first time that the doctor keeps her there in bed for twenty-four hours to see whether there is any evil result or not. He says that three or four such applications will suffice to reduce a large effusion. Patients who had been bedridden for years or months were put in a condition to go about their work in a very short time; and the marvel is that this powerful current so applied in the midst of such an inflamed mass, produced very slight inflammation. Dr. Engelmann said that he had often attempted to use electrolysis in an extremely delicate way with a platinum needle as fine as a fine sewing needle, introduced to the depth of an inch; but here this large coarse trocar or stylet is introduced to the depth of four inches, perhaps, into this inflamed mass, and a powerful current kept up for five minutes; when the patient goes home and goes about her work. It is certainly a wonderful remedy. No doubt others can achieve the same results, although it seems a most venturesome procedure.

When the stylet is withdrawn, a hole is left for four or five days or a week, sufficiently large to pass a small sound; then it gradually closes, the tumor shrinks, the mass becomes less; and at the end of a few weeks there is simply a slight depression.

One would think that the other electrode, which is placed externally upon the body, would cause considerable sensation of heat; but a very large electrode is used, a sheet of metal covered by a layer of fine earth such as sculptors use, the whole being held together by a piece of mosquito bar. Now the advantage claimed for this is that the soft earth adapts itself thoroughly to the skin, touching every spot; and this current, so powerful as to destroy tissue to such an extent as mentioned, does not affect the part painfully. The large electrode is usually placed over the abdomen; or, in case

of a patient who is extremely sensitive, the conductor is divided, one part going to this electrode, and another to a second one is placed on the thigh. Instead of the skin being burned under this electrode, when it is removed the skin is rather cooler than the surrounding parts. Of course the earth is moist.

But this practice seems to be confined entirely at present to this one gentleman. In Germany it is not at all used, and was even spoken of doubtfully. It is like so many of these procedures, major and minor, entirely localized. The reports of the operation certainly seem preposterous, and it is necessary to witness the operation and see it repeatedly and follow the cases to believe in it. That so powerful a remedy can be used with so little injury, seems incredible; yet it is a fact and the patients say the next day they are able to attend to their daily work. Dr. Engelmann saw these operations done a dozen times, and in all but two cases the patient went home, walking home or at most riding home in an omnibus. It is hardly necessary to say that this gentleman who has achieved such splendid results with this method looks forward to a bright future for electro-therapeutics and especially as applied to the treatment of diseases of women. The small value placed upon this treatment with the galvanic battery, at least in the class of diseases mentioned, is doubtless owing to the fact that physicians have not the necessary understanding of the instruments with which they are to work.

Another peculiar feature of the treatment was the free use of the Paquelin thermo-cautery. Many surgical operations are performed with it. It is used frequently to burn a stripe down the back, to affect the spinal cord; it is less cruel than the actual cautery formerly used. A very fine point is used by simply dotting down the spinal column, just enough to leave a small mark, but not to burn into the flesh. It is frequently used in this way in the gynecological clinics as well as in the treatment of nervous diseases. In ovarian irritation a space perhaps two by three inches over the region of the ovary or the stomach, whichever is affected, is dotted with this fine point. The operation is somewhat painful, but not exceedingly so, and does not leave such a mark or necessitate such nursing as a free applicatian of the actual cautery does. In the surgical clinic Dr. Engelmann saw a large abscess apparently from the joint on both hips, extending down to the knee, with half a dozen sinuses at least on each side. The professor followed up

the sinuses burning away all the diseased tissue with the cautery, no knife or other instrument being used. Where a sinus did not extend through but was lost in the tissue, he would follow it to its end. It looked ugly, and two such operations left the room filled with smoke and odor of burned flesh.

Dr. Leete asked to what extent the loss of tissue following the introduction of this instrument is due to the destruction of the tissue by the operation, and to what extent it is due to the sloughing and collapse of the walls, as he understood, the instrument being applied a number of times, perhaps six, eight or a dozen times.

Dr. Engelmann said that in large tumors and favorable cases it was passed as often as that. The action seemed to be a double one, not thoroughly explained, but at least due to a loss of tissue. The sloughs are not considerable; they are very slight; in cases of fibroid tumor there is hardly any sloughing. The opening, which is large enough to pass the end of a lead pencil in when the instrument is withdrawn, two or three days afterwards will barely admit a uterine probe, and then not to its full depth. There is not enough discharge to be perceptible. Within a week or ten days there is merely a depression visible, so there is no great loss of tissue; but the electrolytic effect seems to be the most important one. The activity of absorption that is produced in some cases is very wonderful.

In some cases of cellulitis the sloughing is perhaps the most important result. There is a centre round which the sloughing is excited, and that is perhaps as important as the involution or reduction that is brought about by the activity in the tissues. Where there is thorough induration the effect is more like that in a fibroid tumor, absorption and not sloughing.

Dr. Leete asked if treatment results in complete obliteration of the fibroid tumor, or only in very marked diminution of its size.

Dr. Engelmann could not say positively, as the largest tumors that he saw were from two to four inches above the navel originally, and had been reduced to small masses. The smallest one was three inches below the navel, reduced from ten or twelve inches to four or five inches in diameter in about six weeks. He saw none that the professor claimed to have removed; but he did see patients who had had the entire pelvic cavity filled by deposit from cellulitis or perimetritis where the thickening of the ligaments alone remained, where no deposit whatsoever could be

found. In answer to a question by Dr. Leete, Dr. Engelmann stated that this method was not used for the removal of liquids.

Dr. G. A. Moses expressed his interest in what had been said of the application of electricity in the treatment of disease and his conviction that in order to obtain good results we must have improvements in our instruments, and above all, that the operator must inform himself thoroughly as to the capabilities of the agent and the arrangement of the instrument in order that he may be perfectly aware of any irregularity and correct it. How electricity acts in reducing these fibroids is still unexplained. He was surprised at the benefits that have accrued in cases of cellulitis; because with all experience so far, there is no form of disease that requires to be treated with more caution than these peculiar inflammations. He thought there must be much risk and danger in the use of electricity, in the manner indicated, that the same end can be obtained as certainly by methods that are now in vogue, as by electricity without incurring the risk.

Dr. Engelmann said that he had felt very doubtful about this treatment until he had seen it. It had been his experience that these cases require very delicate handling, and it seemed to him preposterous that a man could plunge a large instrument connected with a powerful battery into such morbid tissues in his clinic, and allow his patient to walk home, and that there should be such rapid improvement; it seemed marvellous. It may be that there is something about the women abroad which we do not find here which enables them to bear the operation better; they may have a somewhat greater power of resistance over there.

Provision for our Insane.

Dr. Nelson read a paper on the Increase of Insanity and its inadequate treatment. (Vid. editorial in November Courier).

Dr. Briggs asked if it is not a fact that we have to take care of a great many patients at our Insane Asylum who should be taken care of elsewhere?

Dr. Nelson did not think there was any considerable number of patients in the City Insane Asylum who should be taken care of at Fulton or St. Joe. Patients from the county are not ordinarily admitted to the St. Louis Asylum. One case is there now, he said, under these circumstances. The patient was committed to the City Asylum temporarily by the County Court of St. Louis County, and

was then transferred to the Fulton Asylum; but on reaching there was sent back, being refused admittance by the authorities of the Fulton Asylum on the ground that she was pregnant. On what ground the states aylums refuse to receive an insane woman because she is pregnant he did not know. He supposed they took the ground that they are simply insane hospitals; and when they have had patients under their care for a sufficient length of time to satisfy those in charge that they have become incurable, they notify county authorities that they must make other provision for them; they only receive patients for curative treatment, and only retain them until the most is done which can be done for them in the way of treatment. This is the method which is pursued in the New York Asylum for the education of idiot children; they only retain them a certain length of time, perhaps until they attain the age of eighteen years, or until they demonstrate their incapacity for further education.

As to the modes of admission to the Insane Asylum, Dr. Nelson stated that there are two other ways of getting patients admitted to the Insane Asylum besides on the order of the Board of Health. There are those who are arrested by the police, and are sent out after examination and certificate by the dispensary physician, with reference to whom the Board of Health are simply notified that during the week such and such patients have been sent out under an ordinance which so provides. Then there is another ordinance which prohibits the detention of insane patients at any of the hospitals. As soon as the superintendent or physician in charge of one of the city institutions, either the City Hospital or the Female Hospital or the Work House is satisfied that any person under his charge is insane, he simply certifies the fact to the Health Commissioner and it is his duty to send the patient to the Insane Asylum. Thus these classes of patients go out without the Board of Health having cognizance of it except a notification.

Dr. Briggs said the statement was made in the paper just read, that the condition of things at the insane asylum was very discreditable to the city, and doubtless there was a very unsatisfactory condition of affairs existing there, but he believed it was more discreditable to the state than to the city; that in this, as in some other matters, St. Louis furnishes more than her share of conveniences of this kind, in proportion to those which are supplied by the state; and he thought that it would be a very good public service

to the citizens of St. Louis to have the Board of Health make publicly known, the exact condition of affairs. He believed it to be the case that the cause of the inadequate provision for the insane in this city, is that patients are thrust upon its care who properly belong elsewhere, to other communities, patients who are dropped in our streets and left to be taken care of by our tax payers. It seems that some means should be adopted for equitably settling this matter.

Dr. Nelson said that some years ago a very strong pressure was brought to bear upon the legislature in the direction in which Dr. Briggs had just spoken of, and, as a result of the report made at that time, that a considerable number of patients were cared for here which should be taken care of by the state, the legislature appropriated $25,000 to cover the expense of such cases as Dr. Briggs has referred to, of patients from the state at large who were brought to St. Louis and became a charge to the city of St. Louis At a succeeding legislature another effort was made to have an increased appropriation of the same kind made and an investigation was set on foot in regard to it; and it was finally concluded that the less there was said about the matter the better it would be for our city—that we had been receiving more than we had expended in that direction, by several thousand dollars.

Dr. Briggs.—I don't think that the doctor's statement reaches the point at all. It seems to me that $25,000 will not pay for the discreditable state of things at the insane asylum. We prefer to let the state keep its money and take care of its insane. We are in no condition now to take $25,000 and their insane patients.

Dr. Leete asked what means the Board of Health or the city authorities have of knowing whether the patients who are sent to the Insane Asylum or the Female Hospital or the City Hospital come properly within the jurisdiction of these institutions; whether they are justly entitled to the benefits of these institutions, and particularly what machinery is employed to determine the rights of insane people that are arrested—picked up on the streets by the police—and sent directly to the insane asylum. He thought that it would not be a very difficult matter to determine. But in all cases it should be satisfactorily determined whether the patient has resided in the city a sufficient length of time to be justly entitled to be cared for as an encumbrance upon this community.

Dr. Nelson said whenever it had been found that patients sent

out to the insane asylum were residents of other places, steps had been taken as speedily as seemed to be practicable to have such party returned to the place from which he came. Most of the cases arrested by the police were persons who had been residents of the city for a greater or less length of time, had become violent, and their friends allowed them to be arrested in a good many cases because they were uncontrollable and it was the quickest way of being relieved of them.

Dr. Leete said his question was what means are employed to determine whether those people were rightfully sent to our insane asylum, whether they were entitled to such care in our city institution. He thought it eminently proper that some steps should be taken very promptly to determine whether a patient picked up on the streets of the city was entitled to care at the expense of our citizens. Of course it is but humane that we should care for them, but when it is learned that they rightfully belong to other communities it is equally proper that they should be sent where they rightfully belong.

Dr. Leete asked if there was an organized plan of procedure to determine the rights of these persons in the City Hospital, the Female Hospital and the Insane Asylum.

Dr. Nelson said it was known definitely, that a considerable proportion—he could not give figures[1]—of patients sent to the city hospital were not entitled to its benefits by reason of their not being citizens. They are sent there out of common humanity because they are here suffering and there is no other way of disposing of them.

Dr. Engelmann thought it well that this subject had been brought up. In regard to the Female Hospital it was a most difficult thing, he said, to limit the patients to those who rightfully belong there. Many young girls came from elsewhere to this city to be confined. They wait until they are about to be confined and then go out there when the time for their confinement is so near that nothing could be done but take them in. How large a proportion of such cases there are, he didn't know.

Dr. Post said he could not speak exactly by the book, but there

1. In the Annual Report of the Superintendent of the City Hospital for year ending April 1, 1885, it is stated that the number of non-residents—on their own statement—treated during the year was 39 per cent. of the whole number treated.

was a rule at the city hall that if a person has been in the city ten days he is entitled to admission to the City Hospital. If a pauper comes here and sleeps at the police station, or anywhere he can find, for ten days he can then apply to the City Hospital for treatment.

Dr. Glasgow said he had a number of times endeavored to get patients into the City Hospital from the St. Louis Mullanphy Hospital and had been informed that a residence of one year was necessary.

Sometimes they had insane patients at the Mullanphy Hospital, taken in before they were aware that they were insane, and having no means of taking care of them there he had tried to get them into the Insane Asylum, and the only way they could do so was to let them get out on the street when the police would arrest them and send them to the Asylum.

Dr. Grindon said he was an assistant at the dispensary for some months, and the general understanding at the dispensary was that they were to send no one to the hospital that they could help taking. When a man came there they would first find out how sick he was; and then, if it was evident that he should have hospital care and attention, the next question was, "Isn't he able to provide for himself?" and if he was not, then the inquiry was, "Isn't somebody else able to do so?" and it was only when the first question was answered in the affirmative, and the others in the negative, that he was admitted to the hospital. If a man was in the Sisters' Hospital, or any other hospital, and was being taken care of there, the city didn't stop to inquire whether it had authority or not; the hospital at which he was couldn't put him out, and therefore he stayed there; or at his friends' house, or wherever he might be until he was put out on the street, then the city would probably take him in. If total strangers came and applied for admission, they were refused unless their condition was such that they couldn't get around at all. Of course if a man came with pneumonia or a continued fever, or something of that kind, he would have to be taken in, or if it was a surgical case. In regard to the ten days' residence that Dr. Post spoke of, he didn't think there was any law about that. It was the understanding that the dispensary physicians acted under the instructions of the Health Commissioner; and he left, as he was forced to, a great deal to the discretion of the man who happened to be at the desk at the time.

Dr. Leete had believed for a long time that the whole matter of

determining the rights of the inmates of the city hospitals was managed in a very loose and unbusiness like way, if it could be said to be managed at all, not because the thing is difficult, but simply because there seems to have been no provision for any person or any number of persons to give proper attention to a matter of such importance. There is a law, or there are laws or ordinances that contemplate the levying of a penalty against any transportation corporation, whether it be by rail or water, that knowingly brings paupers into this city and places them in our streets. To what extent this law is enforced he could not say; but it was very easy to see that any penalty attaching to such a law could be avoided, if the machinery was no better than that which is in use to prevent the admission to the city institutions of persons who are not entitled to the privileges of the same. It was very easy to see how an individual, or a number of individuals, or an incorporated town, could send their paupers, sick and insane here, and keep them in a cheap boarding house for a few days or weeks and then throw them upon the citizens of St. Louis. He did not think it would be a difficult matter to manage this whole business. The evil exists because there is a good deal of human nature abroad in the land and a plentiful lack of moral sense. Individuals and incorporated towns should take care of their own sick and dependent persons instead of shipping them to this city; and they must be educated to a better performance of their duty. This may look like a big undertaking, but he thinks it can be accomplished. There is a certain amount of fairness among people yet; and it is possible to shame people into doing their duty and doing the fair thing. The plan he suggested was to employ a young lawyer, a capable, honest, trustworthy man who would not be ashamed of his employment, whose services would probably be secured at from $1200 to $1800 a year at the very most, whose business it should be to take the record of each person in any of our city instititutions, and immediately communicate with some person or the authorities of the town or city from which he or she came, whether in this city or any other city, and by thus communicating, learn the facts in each case. It would rarely happen that the condition of a person would be such that he would try to conceal the facts with respect to his previous history, and if they were not at once attainable, it would only be a question of time when the facts would be ferreted out; and if, after obtaining these facts a fair and business-like statement

were prepared, showing where the responsibility of maintaining the persons rested, it would not be a difficult matter to have him cared for by the proper persons.

W. W. Torrence, M. D., of Teheran, Persia, has been very successful in his medical treatment of the Prime Minister of that kingdom. This official, in addition to calling the attention of the Shah to him particularly, sent a messenger asking whether Dr. Torrence would take as remuneration for his services a thousand dollars or a decoration from the Shah. The doctor replied that he desired nothing for himself. It will be his effort to secure for the Mission certain forms of aid which can in no way be so well obtained as through the favor of this powerful noble.—*Foreign Missionary*, Oct., 1885.

Courier-Review Call Book.—*St. Louis—J. H. Chambers & Co.*, 1886. 30 patients; $1,00. This visiting list was prepared with special reference to the wants of the "busy practitioner." The printed matter contains such points as he needs for ready reference in emergencies and the blanks afford a simple method of keeping account of services rendered to patients. The binding is substantial and serviceable.

Revue Générale d' Ophthalmologie.—Dr. M. Landsberg, having undertaken to report for the *Revue* the progress of ophthalmology in our country requests authors or publishers of papers or more extended works on ophthalmological subjects to send him copies or reprints to 40 West 44th street, New York, in order that due credit for this sort of work may be given in that special journal.

Missouri State Medical Society Transactions.—We are informed by the secretary, Dr. J. H. Thompson, of Kansas City, that the volume of Transactions for 1885 is now ready. Any one desiring a copy can secure one by addressing Dr. Brooks, of Carthage, and enclosing one dollar.

Persian Opium contains more morphine than that of Smyrna, hitherto considered the best for medical purposes. Not less than $1,200,000 worth is annually exported. The United States ought to secure a larger share of the trade with Persia.

FOREIGN CORRESPONDENCE.

LONDON LETTER.

Summer Vacations. — Constipation. — Aperients. — Mineral Waters.—Electricity.—Suppositories.—Increased Number of Medical Students.—The Working Classes.—Introductory Addresses.—University Degrees.—Lunacy Laws.—Respectability of Physicians.

London, October, 1885.

Most of the members of the medical profession in London have now returned from their holidays invigorated and with a renewed store of energy ready for the duties and labors of a long winter and spring. It is pleasant for those who have had to plod on through the weary weeks of the holiday season attending to the sick poor in the hospitals and the few patients who may have happened to darken, or rather lighten, the doorways of their consulting rooms, to see the cheerful and sunburnt faces of their returning friends and to hear the accounts of their exploits and voyages. All has been pleasant and enjoyable. Some have had hair-breadth escapes, some have climbed high mountains, some have fallen in love, and some have brought back to us a tale of the marvellous remedies and appliances used on the continent of Europe and in America for the relief of human suffering and sin. The greatest discomfort of which we have been apprised as afflicting our tourists has been the usual transient condition of constipation which so often follows a sudden change from the regular routine of life and diet pursued by medical men in the ordinary course of their daily avocation. A thorough change of air from the enervating and unsalutary surroundings of a large town to a brisk and invigorating atmosphere such as is experienced in the Swiss Alps is very likely to induce a transitory state of constipation which can easily be relieved by the ex-

hibition of aperients, and in a few days the healthy exercise and naturally exhilarating effect of a mountain life will soon restore the bowels to their wonted healthy and regular action.

Of all the slight ailments for which we are consulted habitual constipation is one of the most troublesome, and is perhaps a cause of anxiety and annoyance to the majority of women in this country. Men of the educated classes seldom suffer in this way. A regular action of the bowels is to them a subject of the profoundest solicitude. If the morning evacuation is missed or in any way interfered with, the adult man is out of sorts for the rest of the day, he is out of temper, and he thinks he is out of health, and everything goes the wrong way. But with adult women it is exactly the reverse; anything, no matter how trifling, is an excuse for neglecting the calls of nature, and this negligence becomes so habitual that they cease to look upon it as resulting in the omission of one of the small duties of life, the performance of which is necessary for the preservation of health and for enabling us to be agreeable and useful to those around us and for enabling us to perform the other duties of life which fall to our lot. In addition to the usual discomforts and local uneasiness habitual constipation leads to varicose veins, piles, injection of small plexuses of veins on the legs and thighs, flatulence, loss of appetite and other dyspeptic symptoms, foul breath, headache, etc., and in fact, many other trivial and unpleasant symptoms, the sum of which sooner or later drives the individual to her favorite physician to seek relief. Then his perplexities commence, he must not give aperients, for they operate once or twice and then make matters worse than they were before, and if he gives aperients they must not gripe. Of course, he preaches the necessity of regular habits, and more or less attention to diet, both of which the patient avers she has been careful about since girlhood. No! the physician must find some other means. If he recommend the regular ingestion of some natural aperient mineral water he is met with a tale of some poor lady friend who was injured thereby, such as the following: Poor Mrs. Smith took St. Louis water regularly for months and it produced a stricture of the rectum, necessitating the performance of some very serious operation which ended fatally. It is no use explaining that it was most likely the incipient stricture caused the constipation for the alleviation of which the St. Louis water was taken. After such a tale it is no good prescribing any of the min-

eral waters. Some other means must be found. If half the remedies advertised by enterprising American druggists had the effect, which is attributed to them, of promoting a natural and healthy action of the bowels without any subsequent ill consequences, our problem would have been solved a hundred times over, but in practice this is not found to be the case. Most likely no medicinal remedy is without its drawback, but when this habitual constipation has continued for any length of time an atonic sluggish condition of the lower bowel with hypertrophy and dilatation is produced which requires some treatment for its removal. Iron combined with aloes in some form or other is the remedy which most readily suggests itself, but this cannot be tolerated by every constitution. Another remedy is electricity in the form of galvanism and faradism to the abdomen and intestines,but this is a troublesome mode of treatment and one to which most ladies are not overanxious to submit themselves. There remains a mode of treatment by suppositories which I have been told by patients is followed in the States with success. There is no suppository in the British Pharmacopeia, or any with which I am acquainted that will in any way meet the exigencies of these cases. Should there be such a suppository known to the faculty in America, it would confer a great boon upon the profession in this country if we could be acquainted with its composition.

It is reported that the medical schools of London have this session received a large addition to the number of their students in spite of the difficulty of obtaining a medical degree at the London University. The increase in the number of medical students is said to be due to the continued commercial depression, parents not being able to find lucrative openings for their sons in business. If it is thought that in medicine they will receive a fair remuneration for their work, both parents and sons will be bitterly disappointed. The hope that a good day is coming and that some adequate return will be received for the enormous amount of work performed keeps medical men from despondency and buoys them up in maintaining the struggle for existence; but the great majority reach the limit of their powers and succumb before the good day arrives, and their exertions are renewed and carried on by a succeeding generation. Some few medical men, perhaps two or three per cent., obtain a fair competency, and this encourages the less prosperous to persevere in their endeavors. This is fortunate for

medical men and also for suffering humanity, for if the hard lot in store for most doctors was disclosed to them at the commencement of their career many would leave the profession for other less honorable but more remunerative callings of life. In speaking at a recent political meeting Mr. Chamberlain, the notorious radical member for Birmingham, described the lot of the working classes somewhat after this fashion, "as a condition of great and unlimited toil, many were living hard and joyless lives, without the prospect of the attainment of wealth and luxury, without pleasure in the present or hope in the future." With the exception that most medical men hope for a better future, the description, as applied to the working classes, might almost with equal force be applied to them.

At many of the medical schools the time honored custom was followed of opening the winter session with an introductory address. This is one of the few oportunities that the medical profession has of airing its grievances. The speeches delivered on the first of October were always reported for and published in the daily lay press, but since at the larger hospitals the introductory address has been dispensed with, the lay press has taken less notice of the proceedings. The introductory address was discontinued at St. Bartholomew's in 1869, on account of the riotous conduct amongst the students to which it sometimes gave rise. In 1868 the lecturer was almost inaudible from the continual noise and shouting that was indulged in by the students, and the obnoxious authorities of the hospital were pelted with peas. A few years later almost a similar exhibition was afforded at Guy's. So many old and then present students of the hospital, crowded to hear the address that the theatre in which it was usually delivered was found to be too small to accommodate the audience, and a general stampede was made to a large assembly room in one of the neighboring hotels. The subsequent proceedings were so boisterous that Guy's has since consoled itself with an annual conversazione and distribution of prizes to the successful students. After every two or three years still another hospital relinquishes the introductory address, and this year there were no addresses at St. Bartholomew's, Guy's, Charing Cross and the London hospitals. At those hospitals at which addresses were delivered, the several speakers, after welcoming the new students and giving them some sound and moral advice, dwelt upon some of the questions which are at the present

time agitating the medical mind. All of the lecturers attended in some way or other to the question of medical degrees. One speaker suggested that the Dean and Chapter of Westminster Abbey should found a university to be called the University of Westminster, at which it should be possible to obtain medical degrees on easier terms than is now the case at the University of London.

The interest taken here in this subject of university degrees must be almost incomprehensible to members of the medical profession in America, if it is true, as mentioned in the last number of the *Popular Science Monthly*, that in America it is possible for students "to graduate without every having listened to an abnormal heart sound, seen a case of measles or been present at a confinement," that forty-six per cent. of the American schools require only a two years' course of instruction and that all of them give the degree of M. D., that altogether, in America, there are eighty-seven medical schools. In this country, up to within very recent years, the M. D. degree has been restricted to an entirely superior class of doctors, who have passed much more stringent examinations, and who have passed a course of instruction varying at the different universities, but in none was it possible to obtain an M. D. degree before the fifth year of medical study, and in most the time for medical education is now seven or eight years. Certificates have also to be produced that the candidates for the degree have been in responsible charge of patients for varying periods. In England there are now only five universities, in Scotland four, and Ireland two. Another topic that was alluded to in the introductory addresses was the state of the lunacy laws. Dr. Fowler, at the Middlesex hospital, said that it appeared to him that in any reform in lunacy laws there are four principles to be kept in view: 1st. That no man should be deprived of his liberty except by a judicial proceeding; 2d, that no impediment should be placed in the way of a patient being brought under treatment in the early stages of the disease when the chances of recovery are most favorable; 3d, that, except in special cases and with proper safeguards, no medical man should be pecuniarily interested in the detention of a patient; 4th, that medical men acting honestly and to the best of their judgment, and observing the requirements of the act, should be protected from actions at law. Dr. Fowler went on to say that it is a mistake to suppose that the proposed changes in the law are needed only in the interests of the public; they are required with

far greater urgency in the interests of our profession, whose members are called upon, by no wish of their own, to discharge most difficult duties, and who will, if they are wise, demand in no uncertain tones the protection of the law in the honest fulfilment of the obligations it has cast upon them. The scheme Dr. Fowler sketched out is the following: A petition from the nearest relative or friend of the lunatic, and the certificate of one or two medical men should be required as at present, but the certificate or certificates should be only valid for forty-eight hours after the patient's arrival at the asylum. On the admission of a patient notice should be at once sent to a magistrate to attend at the asylum and investigate the case. This he should do with the aid of the medical superintendent, who should have an official appointment as an assessor in lunacy. The patient would be personally examined, and his condition compared with the statements in the certificate.

If satisfied that he is a fit person to be kept under care and control, the justice would sign an order to that effect, and would at the same time give a certificate to the certifying medical man which should, when pleaded, be a bar to any action brought against them by the patient on his recovery. The magistrate, if not satisfied, could order the temporary detention of the patient pending further evidence, and could also withhold his indemnifying certificate if he were of opinion that the patient had been detained without good cause.

If a bill should be passed without a protecting clause for medical men, no respectable practitioner will run the risk involved in signing a certificate of lunacy. Dr. Fowler said that quite recently he had heard of a case in which twenty medical men had been applied to, and all had refused to sign the certificate. To sign a certificate under the present condition of things would in itself almost amount to an act of lunacy, and medical men are well advised to refuse to do so in all cases.

Besides the recent actions against medical men for signing certificates of lunacy, which has brought affairs to the present deadlock, the master of a workhouse has been prosecuted for detaining a supposed lunatic. Up to the present time a wandering lunatic found in any public place without a proper attendant has been at once removed by the police to the nearest workhouse and there detained until he could be brought before a magistrate. The magistrate then ordered the examination of the alleged lunatic by a

medical man and if found insane he was at once removed to an asylum on the certificate of the medical man and by the order of the magistrate. This was also the means by which any individual member of society could protect himself against the danger or annoyance of a madman if his nearest friends refused or neglected to place him under proper control. It was only necessary to give notice to the police that so and so was a dangerous lunatic and not under proper control, he was then arrested by the police and taken to the nearest workhouse until such time as he could be brought before a magistrate; but since the recent action no master of a workhouse dares to admit such a lunatic within his walls.

E. V. A.

Kansas City Medical Index.—Drs. Browning, Drake and Adams withdraw from the editorial staff of the *Index*. Dr. J. W. Elston and Dr. E. S. Lanphear will continue the editorial work and believe that concentration of the work in one office and in fewer hands will give better results as to details of publication.

Carbolic Acid in a ten per cent. solution applied with general friction over the whole surface was successful in the cure of a horse with tetanus after complete failure of chloral. In another case similar friction with a five per cent. solution was equally successful. Absorption of carbolic acid takes place quite rapidly through the skin of animals when applied with friction.

Scarlet Fever in a Letter.—A little girl in Watertown, N. Y., who was dying of scarlet fever, desired to send a kiss to a little playmate in another town. She kissed the letter, which was sent by mail to the little friend, who, wholly unaware of the danger incurred, kissed the letter as a message from her dead friend. In a few days she herself died from scarlet fever contracted by means of that kiss.

Chicago's Water Supply and its contamination by sewage is a matter of so much importance in the view of the Citizens' Association of that city, that they have called for the appointment of a special committee of the aldermen to make a scientific investigation. We hope that before it is too late to save valuable lives, the citizens of St. Louis will arouse themselves to a similar interest as to our own needs.

SELECTION.

OUGHT WE TO PRESCRIBE ALCOHOL, AND HOW?

Read in the Section of Pharmacology and Therapeutics, at the Annual Meeting of the British Medical Association in Cardiff.

By Norman Kerr, M. D., F. L. S., London.

The medicinal administration of alcohol has, especially of late years, been the subject of much disputation.

There yet linger in our ranks, "*rari nantes in gurgite vasto*," a few survivors of the Brunonian wave of stimulation who, out Browning Brown, seem to order fermented wines and ardent spirits to their patients of both sexes, at all ages, in almost every ailment.

There have arisen in our midst some daring innovators, who deny that alcohol in any form or in any quantity, possesses useful medicinal virtues, and teach that in all circumstances its therapeutic use is positively injurious. These latter will not concede a place to alcohol even in pharmacy, and insist on the preparation of drugs in non-alcoholic menstrua. Between these extremes lie two other groups.

The one, while deprecating the routine and indiscriminate prescription of alcoholics, have not lost faith in the value of such beverages when ordered with care, deliberation and precision.

The other group, while condemning the use of intoxicating drinks as therapeutic agents, order alcohol, generously it may be, in a purely medicinal mixture, as alcohol at a definite specific gravity.

I began a quarter of a century ago by adopting the last-named plan, combining the alcohol with "aqua cinnamomi" or some other pleasing diluent, likely to render the taste as agreeable as possible to the palate of the patient. I soon realized, however, that there were cases in which pure alcohol so taken could not be tolerated or retained; and I gradually fell into the method of prescribing the

alcohol in a mixture composed of compound tincture of cardamom, aromatic spirit of ammonia, spirit of chloroform, with cinnamon water, or some similar combination, with the addition of other alcoholic tinctures as indicated.

Both of these modes of prescribing enable the intelligent physician to administer exactly the amount of alcohol which he wishes to employ, and to watch the precise effects of the remedy.

But I at times encountered cases where each of these methods of administration failed, either to secure retention of the potion, or to benefit the patient; and when some ordinary form of intoxicating liquid was the apparent means of tiding the patient over a crisis, or proved efficacious in some other way. At times relief was experienced from whisky, at times from brandy, and at times from some form of fermented wine.

Most practitioners have, as they advanced on their professional career, ordered less and less alcoholic liquor. I, on the contrary, have steadily resorted to this adjuvant to medical treatment more and more. At the same time, so seldom do I prescribe these potent and dangerous remedies, and in so small doses, that the average of recent years has been only once in every 2,000 cases, and the total amount ordered has not averaged annually more than a quart of spirits, and a couple of dozen bottles of fermented wine. As my practice has comprised a fair share of illness and accident commonly treated by intoxicants, such as *post partum* hemorrhage, fevers and shock from injury, and my results have been as good as those of my neighbors, my testimony may be regarded as practically corroborative of the safety and reliability of the treatment of disease and accident without intoxicating drinks. It is right to add that I have found the unfermented port with bark (supplied by Mr. Frank Wright, of Kensington, London) of great value in convalescence from fever and other ailments.

The dictum that alcohol is always, everywhere, and in all quantities injurious, has no warrant from science or from common sense, and is opposed to the facts. In the present state of our knowledge, such a belief can arise only from the wish being father to the thought. In our recoil from the horrors of intemperance, we are apt to regard alcohol as "only evil, and that continually;" but, as professors of the art of heal terpreters of scientific truth, we have no right to allow our reason to be overborne by our feelings.

In pharmacy, though glycerine tinctures, if they be carefully prepared, are, as regards many drugs, satisfactory, there are other drugs with which they are not so successful. There are other non-alcoholic pharmaceutical preparations; but, for myself, I confess that I know of little advantage which most of these possess over the official forms of the *British Pharmacopeia*, except the fashionable attribute of cheapness. Though, up to the present, alcohol has borne the palm over other media in the preparation and preservation of most drugs, it is well to have at command the various remedies which we employ in a non-alcoholic form, as we can thus try the therapeutic power of any particular substance, unmasked and unaffected by the effects of the alcohol. There are also cases in which we may be specially desirous of avoiding even the minutest narcotic effect of the alcohol in an ordinary tincture.

To the question, Ought we ever to prescribe intoxicating drinks? I unhesitatingly reply, Yes. How any one can deny that they have been useful, and have saved life, I am at a loss to understand. I have seen cases—not many, certainly—in which, were I to doubt that the timely and judicious administration of fermented wine or distilled spirit has been the means of recovery, I would as reasonably doubt the usefulness of any other drug. For example, in one case of childbirth to which I was unexpectedly called, the woman appeared moribund, and I had literally no hope of saving her. However, I appied the brandy-bottle, which, of course, stood conveniently near (it is remarkable how handy this physic always is), to her lips, and succeeded in getting about an ounce down. The revival was almost instantaneous, when I forcibly dilated the os uteri, introduced the forceps and delivered. The patient ultimately made a good recovery. I ought to add that, if there had been at command any other stimulant, such as sal volatile or chloric ether, I would have used it in preference to the brandy.

Let me cite one more case in the practice of my friend, Mr. C. H. Greenly, late of Bristol. A boy, aged 12, was struck down by a severe case of measles. After twenty-four hours' vomiting he was pale and collapsed, the pulse very feeble and fluttering, the face hippocratic, and the boy appeared at death's door. My friend, now an octogenarian, having been an abstainer of long standing had tried every non-alcoholic and non-intoxicating remedy that could be thought of. As a last resort, a glassful of champagne was given. The vomiting ceased. In half an hour more, half a glass

ful was given. The patient then was able to retain a little food, began to revive, and ultimately recovered. No more stimulants were administered.

It does not always follow that, because a patient has recovered after taking an alcoholic stimulant, he owes his recovery to that stimulant. *Post hoc* is not necessarily *propter hoc.*

An old lady died in London a few years ago. The same medical man attended her for thirty-five years. She left him a legacy carefully packed in a certain huge box. When this box was opened after her death, the legacy to the medical attendant, to whom she had expressed herself as indebted for his skilful advice and excellent medicine which had kept her alive so long, was found to consist of all the bottles of physic which he had ever sent her—unopened.

I have known recovery take place, and the attending physician congratulate himself on the striking effect of the intoxicant prescribed, when all the time the patient has not tasted it.

Yet, after every reasonable allowance for fallacies, there seems to me to be proof, as clear as we can expect to find of the value of any drug, of unmistakable benefit derived from an intoxicating draught wisely ordered.

Even in cases where an intoxicant seemed utterly inadmissible, I have known good results from such a prescription. Take one instance in the practice of my friend, Dr. Fitch. Dr. Fitch was called in consultation to the bedside of a man apparently suffering from dysentery. The sufferer was *in extremis*, and feebly asked for cider. The physicians all agreed that nothing could be worse for him. As they were also agreed that nothing more could be done to avert a fatal termination, my friend said, "As we are of one mind that the man is dying, cider can't kill him. Let us give him what he wants." A wineglassful was brought. The patient drank it with avidity, and asked for more. "By all means," said my sensible friend; "fetch a pitcher and let him drink as much as he likes." The man drank a quart, and, to the astonishment alike of physicians and his friends, the man made a perfect recovery.

In support of the allegation that alcohol is always injurious in therapeutics, no proof has as yet been adduced. It is interesting and instructive to learn that, in the experience of the London Temperance Hospital, there has been a mortality of only five per cent. in a record of 2,862 in-patients, to only three of whom an intoxi-

cant had been administered; but no argument against the careful therapeutic employment of alcoholic liquor can be founded on these figures. The numbers treated, in comparison with those attended at other hospitals, have been so small that the law of averages has not yet had time to operate. A single hospital epidemic might at once expose the fallacy of drawing a positive conclusion from so limited an induction, by seriously raising the mortality. The only legitimate use which can at present be made of the experience at this most useful institution is a simple statement of the facts (without the enunciation of any dogmatic conclusions), such as has been given by Mr. Pearce Gould in his report of a year's surgical work at this hospital, presented to the surgery and anatomy section of the British Medical Association, a report which I may be permitted to commend for its modesty and candor. To show how dangerous it is to generalize from insufficient data, it will suffice to refer to the variation in the death-rate in enteric fever at the Middlesex Hospital, which was 28.8 per cent. in 1876, and 2.5 per cent. in 1880.

Hitherto, most of the non-alcoholic experiments have been pitted against the profuse administration of alcoholic drinks, a most fallacious procedure. This has been done notably with enteric fever; yet the only recently published record of cases of this disease treated without alcohol in this country in a public institution shows a higher death-rate than I have ever myself seen, though occasionally giving small doses of intoxicants.

A curious exemplification of the confusion of popular reasoning on the medical use of alcohol will be found in a generally accurate and attractive volume, a work of permanent value, by Mr. Axel Gustafson (Kegan Paul, Trench & Co, 3rd edition, pp. 205-7). The accomplished author, who is not a member of the medical profession, contrasts the low mortality in the treatment of enteric fever by cold bathing with the higher mortality by hospital treatment embracing alcoholic stimuli, oblivious of the fact that to patients subjected to the cold bathing alcoholics were given. The comparison ought not to lie between the absence of alcohol and its indiscriminate prescription, but between the former and the intelligent employment of the drug. The best method of arriving at the truth is to treat one half of the patients admitted into the hospital with no alcoholic liquors, and to give these remedial agents to the other half with the utmost care and discrimination, ensuring the equality

of the conditions of both groups as closely as possible. This plan was adopted by Dr. Bristowe, and his experience was corroborative of my own, that there was practically no difference in the issue. The difference in favor of no alcohol, as contrasted with a lavish use of alcohol, is, however, very marked, as was shown by Dr. Gairdner and Dr. J. B. Russell many years ago.

The record of the results of a greatly lessened administration of alcohol in the treatment of small-pox, in the London hospital-ships, is of deep interest. Having been requested to inquire into the effects of this diminished alcoholic stimulation on the mortality and convalescence, Dr. Birdwood stated that, though the gravity of the cases had increased, with a mortality of 15 per 100 in the metropolis, the ships' death rate had remained at less than 7 per 100. Convalescence had been more rapid, and there had been fewer and less serious complications from abscesses and inflammatory boils. Other causes had contributed to this improvement, but the medical officers attributed a considerable share in the amelioration to a greatly diminished prescription of alcohol. On the whole, I have no hesitation in giving utterance to the opinion that, as a rule, most cases of all kinds of fever can be best treated without intoxicating remedies, only a rare case calling for and benefiting by such therapeutic adjuvants. Without hesitation, I may make a similar statement with reference to most other diseases.

How ought we to prescribe alcohol?—We should never forget that intoxicating drinks cannot be ordered without some risk of a taste for them being acquired, and the remedy itself proving worse than the original disease.

This risk was strikingly exemplified in the case of a favorite dog of two maiden ladies of my acquaintance. This animal was seized with an attack of acute pneumonia. The veterinary surgeon gave the dog brandy; the dog recovered, whether because of or in spite of the stimulant, I cannot tell. Ever since, if he hears anyone speak of brandy, he is up in a moment on his hind legs, begging for the seductive physic. Though I believe the cases of what may be called "medical drunkenness" are not nearly so numerous as is popularly asserted, I have known instances where the medical prescription of strong drinks has been the beginning of a career of excess.

We ought to in all cases let alcoholic liquors be the last, and not the first, remedy, as they are ever fraught with possible danger.

Especially we ought not to administer such "tricky spirits" to reformed inebriates, or to persons who labor under the suspicion of a transmitted alcoholic taint. The whole system of all such is ever ready to respond to the lightest touch of the poison, and the smallest sip will often light up an uncontrollable conflagration.

For these reasons, as well as for the scientific reason that we should administer our remedies in as well defined doses as possible, and in such a form as to be liable to little disturbance from the action of other agents, it is desirable to order alcohol at a certain specific gravity in some elegant mixture, or in a preparation into which alcoholic tinctures of an ascertained strength enter. By both these plans you can control the amount of alcohol you employ, and you can note the effects.

But intoxicants are not always given to the sick purely for the alcohol which they contain. The ethers developed in wines and spirits are sometimes of a high medicinal value; and, till science has succeeded in separating these ethers from the alcohol with which they are associated, it will be bad practice to exclude intoxicating drinks altogether from our armamentarium.

Bearing in mind the possibility of the narcotic setting up a new chain of diseased symptoms, and even leading to those habits of intemperance which we all reprobate, we ought to limit our prescription of an intoxicant to the occasion only, taking due precaution that the medicine is not continued after the purpose for which the stimulant has been given has been gained. We ought, also, for these reasons, as well as to secure the definite benefit which we hope to attain from the administration of an alcoholic drink, to order the remedy in accurately defined doses. By the adoption of such a line of practice, we shall act in a spirit of loyalty to the high character of our calling; we shall avail ourselves of all the aid derivable from a potent narcotic remedy; we shall shield ourselves from any imputation of recklessness and carelessness; and we shall have the satisfaction of knowing that none of our patients can rightfully reproach us with having launched him on a deep, beneath the treacherous surface of which a perilous fate may overtake the frail and venturesome voyager.—*Brit. Med. Jour.*, Sept. 5, '85.

The Maryland Medical Journal will hereafter be published by the Journal Publishing Company, and Dr. Ashby will continue to occupy the editorial chair.

COMMUNICATION.

TREATMENT OF MALARIA.

Graham, Indiana, Oct. 28, 1885.

Editor Courier:

Dr. Kingsley's able and timely article on Malaria in Children, and Dr. Bribach's on Typho-Malarial fever, which appeared in the August number of the St. Louis Courier of Medicine, confirms the writer in an opinion he has long entertained, that the profession is not a unit in the method of treatment of malarial fevers. Observations extending over a period of twenty years, practising all the time in a malarial region, has satisfied him that there are errors of treatment of these forms of fevers that ought to be avoided.

It is a common occurrence in some neighborhoods to hear from physicians language like the following: "Now, sir, you give your boy one of these powders every two hours until the fever rises, and then quit until it goes down again." I have known cases treated in the above manner to linger for a long time before any improvement would be manifest, and others to die because they did not receive a sufficient amount of medicine. The following plan of treatment I have carried out with good success for twenty years in several hundreds of cases of malarial fevers.

First, if the tongue be coated, give one or two of the following pills:

℞ Pill. hydrarg., - - - - - - - gr. ij.
Podophyllin., - - - - - - - gr. ¼.
Pulv. Ipecac., - - - - - - - gr. ½.
M. ft. pill. no. j.

And commence immediately with one of the salts of cinchona.

℞ Quininæ sulph., - - - - - gr. xxx.
Pulv. capsici, - - - - - - - gr. xij.
Leptandrin, - - - - - - gr. iv.
M. Chart. No. xij. Sig. One every two hours.

I have used quite extensively the sulphate of cinchonia, and have found it effective; but the dose most be larger than either cinchonidia sulph. or quiniua sulph. I have found leptandrin to be excellent, especially when the tongue is dry and parched. It does not purge, but acts as an hepatic stimulant. I give bismuth and Davis' powder, the latter is made as follows:

℞ Pulv. opii., - - - - - - - - -
Pulv. ipecac., - - - - - - aa ℥j.
Pulv. camphoræ, - - - - - - ℥ij.
Potass. brom., - - . - - - ℥j.

M. Sig. Dose the same as the old pulv. Doveri.

If there is much nausea, which is quite common, give one grain of calomel with five grains of bismuth, and have the patient drink mint water with ice in it, and apply in some case a sinapism to stomach. The diet is to be unirritating, but nutritious; patient's clothing to be kept clean by often changing; stimulants to be given freely if any symptoms of failing vitality appear. In a given case of malarial fever my method is to *saturate the system with the anti-periodics and keep it up until the fever subsides.* I would not favor such large doses as Dr. Bribach, except in cases of pernicious fever.

I will just say in conclusion that I do not claim a better method of treatment than every body else; but having treated eight hundred cases of intermittent and remittent fever, according to the plan outlined above without the loss of any, I am constrained to believe that as "nothing succeeds so well as success," I shall continue to pursue the same course until I find a more excellent way.

J. F. Davis, M. D.

Sanitary Inspection.—The inspectors in Chicago during the first nine months of the year, made 63,264 examinations, of which 51,381 were made in places of habitation, 10,499 in factories, stores and other places of employment, and 1,384 were made according to law in new buildings in process of construction.

Missouri State Board of Health.—Dr. Rauch in his last quarterly report to the Illinois State Board of Health says: It is a pleasure to state that I am frequently reminded of the existence of the reorganized State Board of Health of Missouri in a manner that promises well for the future.

OBITUARY.

Dr. John L. Atlee, one of the most eminent of American surgeons, one of the founders of the American Medical Association and in 1882 President of that body, an Honorary Fellow of the American Gynecological Society died in Lancaster, Pa., at the age of eighty-six years, having been born in the same place Nov. 2, 1799. He graduated in medicine iu 1820 from the University of Pennsylvania. He returned then to Lancaster and he soon acquired a reputation as a successful surgeon. In 1843 he made the first double ovariotomy in the history of medicine. He was identified with many medical societies and was a trustee of many public institutions and a contributor to many medical journals.

Dr. E. R. Duval, of Fort Smith, Ark., one of the corresponding editors of the Courier died a few weeks since. The following resolutions were adopted by the *Fort Smith Medical Society*:

Whereas, God in His inscrutable wisdom has by His dread messenger Death summoned our beloved brother Dr. E. V. Duval in the prime of his manhood and in the midst of his honorable and useful career, and

Whereas, in his death the State sustains a loss of one of her noblest citizens, society one of its brightest ornaments, the medical profession one of its most distinguished members, and, as individuals, we are deprived of our warmest and truest friend. Therefore, be it

Resolved, That although deeply grieved it is meet that we humbly bow in submission to the will of an all-wise God.

Resolved, That though his place among us is vacant and cannot be filled, we will ever cherish his memory in our hearts; his place in our affections shall be disturbed neither by time nor new friends.

Resolved, That we offer to his wife and children our heart-felt sympathy, appreciating as we do the great loss they have sustained.

Resolved, Tha tthese resolutions be spread upon the memorial page of our record book and a copy transmitted to his family.

J. Gilbert Eberle, M. D.
Geo. W. Smith, M. D.
D. T. Johnson, M. D.
J. T. Both, M. D.
R. B. King, M. D.
L. L. Saunders, M. D.
A. Dunlap, M. D.
J. M. Kelliam, M. D.
W. W. Bailey, M D.

The American Public Health Association will convene at Washington, D. C., Tuesday, December 8, at 10 o'clock A. M. The meetings will be held in Willard's Hotel Hall, Pennsylvania Ave.

The Executive Committee have selected the following topics for consideration at said meeting: I. The Best Form in which the Results of Registration of Diseases and Deaths can be given to the Public, in Weekly, Monthly, and Annual Reports. II. The Proper Organization of Health Boards and Local Sanitary Service. III. Recent Sanitary Experiences in Connection with the Exclusion and Suppression of Epidemic Disease.

The Secretary has received notice of the following from the able and well known writers named below:

Forms of Tables for Vital Statistics, by Dr. J. S. Billings; Sanitary and Statistical Nomenclature, by Dr. E. M. Hunt, Trenton, N. J.; Statistics of Consumption in Rhode Island for a Quarter of a Century, by Dr. Charles H. Fisher, Providence, R. I.; The German System of Physical Training, by Dr. E. M. Hartwell, Baltimore, Md.; School Hygiene, Public and Private, by Dr. William Oscar Thrailkill, San Francisco, Cal.; Sanitary Protection of New Orleans, Municipal and Maritime, by Dr. Joseph Holt, New Orleans, La.; Maritime Sanitation, by Dr. S. T. Armstrong, U. S. M. H. S., Memphis, Tenn.; Small Pox in Canada, and the Methods of Dealing with it in the Different Provinces, by Dr. P. H. Bryce, Toronto, Ont.; The Debit and Credit Account of the Plymouth Epidemic, by Dr. Benj. Lee, Philadelphia, Pa.; An Epidemic of TyphoidFever, by Dr. C. A. Lindsley, New Haven, Conn.; Experiences in Disinfecting Sewers, by Dr. O.W. Wight, Detroit, Mich.; Progress of Health Work in Kentucky, by Dr. J. N. McCormick, Bowling Green, Ky.; Observation on the Cape Fear River Water as a Source of Water-Supply: A Study into the Character of Southern River Water, by Dr. Thomas F. Wood, and several others which we have not space to enumerate.

The Committee on Disinfectants will present quite a voluminous report (printed), embodying their investigations and conclusions on the subject of disinfection and disinfectants. This report will be one of great public interest, and will probably call forth much interesting discussion.

The Lomb Prize Essays will be presented to the Association on Thursday, December 10.

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